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The October *Review*

The original impetus for a new survey of individual time use was an unsuccessful legislative proposal that the Bureau of Labor Statistics "conduct time-use surveys of unremunerated work in the United States," according to Michael Horrigan and Diane Herz's overview of the American Time Use Survey (ATUS). In the end, ATUS provides much more than that: the splits between work, leisure, and other activities, where these activities are performed, and who in the family spends how much time at which activities, among others. This survey will prove to be a rich source of research data and valuable input to policymaking.

Dino Drudi and Mark Zak report on multiple-fatality incidents in workplaces in the last five years of the 1990s. One of their conclusions about such tragedies is that the circumstances surrounding them and the industries and occupations in which they are most prevalent are not representative of the universe of fatal occupational injuries.

Julie Hatch examines public sector employment in recession and recovery. She finds that government jobs, particularly at the State government level, rose sharply during the recent recession, but fell back in budget shortfalls that followed the downturn.

Fatal work injuries in 2003

A total of 5,559 fatal work injuries were recorded in the United States in 2003, a small increase from the revised total of 5,534 fatal work injuries reported for 2002. The rate at which fatal work injuries occurred in 2003 was 4.0 fatalities per 100,000 workers, unchanged from the rate reported for 2002.

Fatal highway incidents were down in 2003 for the second consecutive year, but continued to account for the highest number of fatal work injuries. The 1,350 fatal highway incidents in 2003 accounted for about one out of every four fatal work injuries. The number of workplace homicides was higher in 2003—the first increase since 2000. Despite the higher total, the 631 workplace homicides in 2003 represented a 42-percent decline from the high of 1,080 homicides in 1994.

In 2003, agriculture, forestry, fishing, and hunting had the highest rate of fatal work injuries of any industry sector: 31.2 fatalities per 100,000 workers. The largest number of fatal work injuries in 2003 was in the construction sector. The 1,126 fatal work injuries in private construction accounted for more than one out of every five workplace fatalities in 2003. Additional information is available from "National Census of Fatal Occupational Injuries in 2003," news release USDL 04–1830.

Time-use survey results

The new American Time Use Survey (ATUS) has released its first estimates on how Americans spend their time. Among the highlights:

- On the days that they worked, employed men worked about an hour more than employed women—8.0 versus 7.1 hours.
- Employed women 18 years and older spent about an hour more per day than employed adult men spent doing household activities and caring for household members.
- On days they worked, about 1 in 5 employed persons did some or all of their work at home.
- Adults in households without children spent about 1.4 hours more per day engaged in leisure and sports activities than those with children.

Data collection for the ATUS began in January 2003. The survey is sponsored by the Bureau of Labor Statistics and conducted by the U.S. Census Bureau. ATUS estimates for 2003 are based on interviews of about 21,000 individuals. Respondents were interviewed only once and reported their activities for the 24-hour period from 4 a.m. on the day before the interview until 4 a.m. on the day of the interview—their "diary day." See the article by Michael Horrigan and Diane Herz starting on page 3 for more details about the design and execution of the survey.

Job tenure

Nearly 31 percent of workers age 25 and older had 10 or more years of tenure with their current employer in January 2004. Thirty-two percent of male wage and salary workers age 25 and older had been with their current employer for 10 years or more in January 2004, compared with 29 percent of women. Since January 1983, when the proportions were 38 percent for men and 25 percent for women, the gap between them has narrowed considerably.

In all age categories below age 60, the percentage of men who had 10 years or more of tenure with their current employer is higher than that of women. In the categories age 60 to 64 and age 65 and older, women are more likely than men to have had 10 or more years of tenure. To learn more, see "Employee Tenure in 2004," news release USDL 04–1829. □

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http://stats.bls.gov/newsrels.htm

Planning, designing, and executing the BLS American Time-Use Survey

From conception to implementation, the American Time Use Survey was 12 years in the making; its four developmental phases represented ever deeper levels of agency commitment and outside statistical support, as well as an evolution in thinking regarding survey estimation objectives, units of measurement, sampling plans, and data collection and coding protocols

Michael Horrigan
and
Diane Herz

This article describes the evolution of the American Time Use Survey (ATUS) from its inception as an issue of statistical policy interest in 1991 to its implementation in January 2003 as an ongoing monthly survey sponsored by the Bureau of Labor Statistics (BLS, the Bureau). This 12-year process included four developmental phases. Each successive phase represented a deeper level of agency commitment and outside statistical support. Reports referenced in the text reflect an evolution in thinking at both the Bureau of Labor Statistics and the Census Bureau regarding survey estimation objectives, units of measurement, the universe frame and sampling plan, and data collection and coding protocols.

First phase: policy environment

In 1991, a bill introduced into the 102nd Congress called for the Bureau of Labor Statistics to "conduct time-use surveys of unremunerated work performed in the United States and to calculate the monetary value of such work." Although the bill, called the "Unremunerated Work Act of 1991," did not make it out of committee, the existence of a bill naming the Bureau as a sponsoring agency spurred BLS management to begin studying the issue.

In April of the same year, the Bureau sent a representative to a conference sponsored by Statistics Canada on the measurement and valuation of unpaid work. At the conference, it became clear that there was a strong sentiment in the international community that the lack of a time-use survey in the United States from which to measure the value of unpaid work was a significant data gap in the U.S. statistical system.

Following the conference, a BLS working group was convened to review the literature and summarize the conceptual issues related to measuring and valuing unpaid work. The initial focus of the group was on conceptual issues related to assigning a monetary value to time spent in unpaid work activities. For example,

- In assigning a wage value to time devoted to unpaid work, should one use the wage of a specialist (say, a gardener) or a generalist (say, an average worker) who may be hired to produce the good or perform the service?
- Should the quality of the goods produced or services performed in unpaid work be accounted for?
- How should one account for the marginal utility that may be experienced by the individual who engages in producing a nonmarket good or service?

In the context of the working group's report, a time-use survey was viewed simply as the vehicle for collecting input data related to the conceptual

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issues raised. Very little effort was directed toward examining other applications of time-use data or toward the practical considerations of collecting such data. The initial working group issued its report in 1993.[1]

Second phase: the pilot study

After issuing its report, the working group was disbanded, and the Bureau, while maintaining an interest in the valuation of unpaid work, was not actively engaged in further research on the issue. This period of inactivity, however, did not last long. In 1995, in Beijing, China, the United Nations held an international conference on the status of women. As it did at the Canadian conference, the issue of measuring and valuing unremunerated work emerged as a topic of substantial international interest. The Beijing conference's Platform for Action (item 206) stated, "national, regional and international statistical agencies should measure, in quantitative terms, unremunerated work that is outside national accounts and reflect its value in satellite or other official accounts that are separate from but consistent with core national accounts."[2]

The Beijing conference prompted the BLS Commissioner to ask the time-use working group to reconvene. Now, however, the group's focus shifted from investigating conceptual issues associated with unpaid work to examining the feasibility of collecting time-use data.

Between 1995 and 1997, the working group undertook two significant activities directly related to examining the latter task. First, the Bureau hired a survey contractor, Westat, to conduct a pilot study to test two alternative time-use questionnaires using telephone interviews. Second, the Bureau cosponsored a time-use conference with the MacArthur Network on Family and the Economy.

The BLS pilot study on time use was conducted in 1997. Drawing on other surveys (primarily one conducted by Statistics Canada), it provided a foundation for what would become the third phase of the working group's efforts. The pilot study discussed response rates, the collection of data on secondary activities, and how to probe for specific information. It also guided some subsequent research on when to call respondents.[3] The first phase of the study included 21 cognitive interviews that focused on the ease or difficulty that respondents had in recalling activities from the previous day. The second phase was a random-digit-dialing sample of 1,000 households (1 person per household). The respondents were randomly divided into two groups. Members of the first group were asked what activities they were engaged in, when they performed each activity, and who was with them at the time. Members of the second group were asked the same questions, as well as whether they were doing anything else at the same time.

The results of the pilot study were presented in the fall of 1997 at a conference entitled "Time Use, Non-market Work, and Family Well-Being," cosponsored by the Bureau and the MacArthur Network on Family and the Economy.[4] The conference yielded many benefits. First, it introduced the Bureau to the international community of time-use researchers and survey practitioners. Second, it provided the Bureau and, in particular, the Commissioner, with substantial evidence to support the assertion that the lack of a time-use survey was "the biggest single gap in the Federal Statistical System."[5] Third, it gave the BLS time-use working group critical feedback on its work to date and influenced the direction of work in the next developmental phase.

Two of the themes that emerged from the conference greatly influenced subsequent work on the survey.[6] First, there was substantial debate over the desirability and the feasibility of measuring secondary activities. Although the theoretical value of such information was broadly supported, varying opinions were expressed about the ability to collect the data accurately and about how one might interpret results. Paper diary approaches that provide respondents the opportunity to list secondary activities, such as that utilized in the Australian time-use survey, are the best method; however, to be optimal, they must be combined with personal interviews, which permit the interviewer to probe diary entries in order to get accurate data. As a result, these approaches are quite costly. A computer-assisted telephone interview (CATI) allows for probes of secondary activities. However, the working group was concerned over the repetitive nature and associated respondent burden of asking, "What else were you doing?" after every activity reported. The discussion at the conference also pointed to the significance of childcare and, in particular, secondary childcare, as a key, if not *the* key, secondary activity. Some expressed the sentiment that capturing childcare well, even in the absence of data on other secondary activities, would be a significant accomplishment.

The second theme that emerged was the choice of the unit of observation in a time-use survey. Conference participants drew a sharp contrast between an approach in which all household members were interviewed and an approach in which only one individual per household was interviewed. The former is more consonant with household bargaining models, according to which choices made regarding time use are partly a function of how other members in one's economic unit are spending their time and the focus is on behavioral models of constrained choice. Ancillary information on the household also figures importantly, such as the ownership of capital (for example, household technology) that can influence the time spent doing unpaid work.

The participants noted that using the individual as the unit of observation would still allow reporting of many of the same concepts that multiple interviews would allow, although without the richness of detail that is particularly useful in testing household bargaining models. For example, it would be possible

to estimate the average time that married men with working wives spend doing housework.

Third phase: the Commissioner's charge

Following the BLS-MacArthur conference, the BLS Commissioner asked the working group to develop a more detailed plan for collecting time-use data. The resulting report became the blueprint for the ATUS. The Commissioner's request came against a backdrop of activities by the National Academy of Sciences (hereafter, National Academy).[7] Having attended the BLS-MacArthur Network conference, members of the National Academy proposed holding a workshop on the value of time-use data for the U.S. statistical system. The Bureau was invited to present a report on how it would approach the collection of time-use data.

The report submitted by the Bureau to the National Academy's workshop was the working group's first full-fledged attempt to describe how the Bureau would conduct a time-use survey; as such, it stands in contrast to the eventual survey operation that was fielded.

Assumptions and constraints. Some key assumptions and constraints were imposed at the outset of the third phase of the development of the ATUS. These assumptions were the outgrowth of discussions that took place after the BLS-MacArthur conference and reflected the evolution of the thinking at the Bureau between the time of the conference and that of the Commissioner's charge to the working group:

- *Unit of observation*: One individual per sampled household.
- *Sample frame*: Households permanently leaving the Current Population Survey (CPS; "month-in-sample 8," or "MIS-8," households).
- *Collection mode*: CATI.
- *Reference period*: A 24-hour-day time diary (a listing of activities the respondent participated in on the day before the interview).

The choice of one individual per household (instead of multiple members of the household) as the unit of observation was a key point in the deliberations.

The group was sympathetic to the views of those advocating interviewing all members of a household. However, a number of countervailing views emerged. First, the perceived data gap in U.S. statistics entailed a clear interest in knowing how individuals spend their time (in addition to the obvious interest in household decisionmaking). Many of the potential uses of time-use data cited at the BLS-MacArthur conference did not require data to be collected from more than one individual in the household. These potential uses, or estimation objectives, included valuing nonmarket work; providing an alternative measure of hours of work; and measuring time spent in various activities, including commuting, providing child care, time spent in training and education, and leisure time.[8]

Second, it was unclear why information on individuals' use of time, combined with ancillary information on household structure, could not be used to inform household bargaining models. For example, consider an activity such as grocery shopping. A time-use survey that interviews one individual per household permits reporting how the percentage of total grocery shopping time is conducted by husbands and wives in married-couple families. A time-use survey that includes all family members will provide the same statistic. What is missing from the survey of individuals is the conditional distribution of activities engaged in by a spouse while the other is doing the grocery shopping. Although such a distribution would provide richer behavioral data, no clear and compelling econometric argument was advanced that the gain in information resulting from interviewing every household member would be worth the large loss in sample yield (assuming a fixed budget).

For example, if one were to adopt the purist view that interviews with all household members are necessary to inform household bargaining models correctly, the possibility of low response rates from multiple family members (no matter what data collection methodology is used) would call into question the efficacy of such an approach. That is, at what point do missing data on some household members so dilute the quality of data needed to conduct research on household bargaining that it is not worth the expense and effort to obtain such data? Also, it can be argued that bargaining may occur over a longer period, such as a week, and that information about 1 day may not provide as rich a data source as is needed for some analyses. Finally, in surveys that attempt to interview all household members, systematic bias may be introduced in terms of who tends to be a respondent and who tends to be a nonrespondent. In particular, households which allocate their time so that someone is always home with the children will have a higher likelihood of missing an interview with the individual or individuals who are more likely to be away from home.

The choice to interview only one individual per household reinforced the decision to use CATI (which was tested early in the pilot study). Substantially lower costs per case with CATI than with personal interviews had already suggested that funding would be more easily obtained if a CATI approach were advanced. One advantage of a personal-visit protocol, were it selected, would probably have been higher response rates from multiple household members than would have been achievable with a CATI protocol. Once CATI was selected, however, Statistics Canada's report on low response rates that were experienced in attempting to interview a second household member in a CATI environment lent further support to the Bureau's decision to interview only one individual per household.[9]

The Bureau also considered a mail-out, mail-back protocol. While less expensive to administer than CATI, this protocol was deemed too risky because it might have generated unacceptable response rates and it would have eliminated the use of important probes (to ensure codable data) during the interview. The group also thought that ensuring that the correct respondent reported on the preassigned day (discussed later) would be more controllable in a CATI interview than with a mail-back diary or with a dropped-off diary and a field followup.

Selecting a stratified probability sample from the CPS was designed to enrich the demographic and economic information available on each individual, to reduce sampling costs, and to minimize respondent burden (because, in ATUS, many pieces of information would be imported rather than collected). The CPS also was compatible with the choice of CATI and was a relatively inexpensive sample frame, with recent phone numbers available for 95 percent of CPS households. Finally, by the end of their time in the CPS, many potential respondents are accustomed to answering interview questions by phone. (The ATUS sample person is the same as the CPS reference person in about 59 percent of cases.)

The choice of a 24-hour day as the frame of reference stands in contrast to longer (more retrospective) reporting protocols. A number of existing U.S. surveys already include reporting on the use of time over longer periods (such as "How many hours did you work last week?"). The choice in the ATUS was made to be consistent with most international practices on collecting time-use data and to minimize recall bias.[10]

The initial process. Given its charge, the working group concentrated on the following elements of survey design in preparation for the National Academy workshop:

- Primary and secondary estimation objectives of the survey.
- Sample size and the sampling plan.
- Data elements of the survey instrument.
- Operational considerations: systems development, training, field staff, and coding.
- Survey output.

The report delivered at the workshop can be viewed as a detailed first draft of BLS thinking about many of the elements of what has become the ATUS. After the workshop, the working group began anew on some of these elements, reconfirmed existing positions on others, and filled in gaps that had not been considered. For the purposes of this article, each element of the survey is considered in turn, and the development of the group's thinking from the National Academy workshop to full production in January 2003 is traced. Exhibit 1 provides a concise summary of each of these elements. The choice of software for each system, the sampling stratification and weighting plan, the variance estimation, the imputation and editing programs, and the training and certification procedures for coders and data collectors were not specified in the National Academy workshop, but were developed for production.

Discussion at the National Academy workshop. The presentation of the BLS proposal was met with strong overall support, despite serious misgivings by some on the choice of one individual as the sampling unit or the decision to interview each respondent only one time. Several attendees expressed the opinion that estimating the average time spent performing an activity in a week required multiple diaries from individuals, preferably two weekday and two weekend diaries. There was also support for repeating this approach for the same individuals several weeks during a year. In the end, the arguments were viewed as survey methodological preferences rather than absolute statistical requirements. Collecting 1-day diaries still would permit the production of all the desired estimates. The National Academy workshop report endorsed the BLS model, recognizing that the lack of a national time-use survey was an important gap to fill, regardless of disagreements over methodological issues.

Fourth phase: preparing for production

In December 2000, the survey received official approval and funding. A great deal of foundation work had already been completed, but each area would need to be revisited in more detail and become fully operationalized. Interagency work on the survey began in earnest, and joint BLS-Census Bureau teams were formed to cover management oversight, sampling and weighting, questionnaire design and development, activity coding, and operations. The survey was initially slated for full production in January 2002. A 4-month delay in budget approval that year had already set back the production schedule, and the systems requirements indicated that additional development time would be needed. New systems were required for the ATUS data collection instrument, the activity coding system, and call management at the call center. The starting date was rescheduled to January 2003.

Many activities occurred between funding in December 2000 and production in January 2003. The following were three primary ones:

- *Operations field test*: an extensive operations test in the summer of 2001.
- *Dress rehearsal*: a test of the questionnaire and operations with live cases in mid-2002.
- Prefielding: early fielding of the survey to resolve remaining problems (September–December 2002).

During the December 2000–January 2003 period, the Bureau of Labor Statistics and the Census Bureau continued to receive

Exhibit 1. **American Time Use Survey elements: a comparison of analysis at the National Academy of Sciences conference and changes as of full production**

Concept	Analysis at National Academy conference	Changes as of full production
Survey estimation objectives (uses)		
Primary sampling objectives	Draw a sample size large enough to generate quarterly estimates of the proportion of the time spent in one- and two-digit activities for an average week, weekday, and weekend.	The scope of the sample was increased to include 15-year-olds because potential users expressed an interest in time-use statistics for teens. The CPS sample frame includes persons 15 and older.
	These estimates would be presented for the entire U.S. population (16 years and older) and for selected demographic and labor force groups.	In addition, youths (various age cutoffs 15 years and under) were included in many other countries' time-use surveys.
Secondary sampling objectives	Generate annual estimates of the time spent in one-, two-, and three-digit activities for an average week, weekday, and weekend.	Largely unchanged. The original team listed a series of demographic breaks. Actual publication detail depends on the sample that falls in each demographic and activity group cell.
	Present these estimates for the entire U.S. population and separately for selected demographic groups.	
Periodicity	Continuous for 14 months (2 months of prefielding, followed by 12 months of collection). Then repeat periodically.	Continous indefinitely, with 4 months of prefielding before production.
Reference period	The day before the interview.	Unchanged
The designated day	Each respondent would be assigned a designated interview day for reporting about the previous day.	Unchanged
How to handle noncontact on the designated day	Call back exactly 1 week later, asking respondent to recall the previous 24-hour day. Call back again each week for up to 4 weeks.	Field period was extended to 8 weeks. This element was studied at length. As discussed subsequently, the possiblity of substituting freely among Monday, Tuesday, Wednesday, and Thursday reference days was carefully examined.
Sampling		
Choice of sampling frame	Household addresses from Month-in-sample 8 of the Current Population Survey	Unchanged
Unit of observation	Randomly selected individual from each household	Unchanged

Exhibit 1. Continued—American Time Use Survey elements: a comparison of analysis at the National Academy of Sciences conference and changes as of full production

Concept	Analysis at National Academy conference	Changes as of full production
Sample size	Sample required to achieve 2,000 completed cases per month at 70 percent.	Sample for 2003 was unchanged at about 3,270 per month. However, response rates that year averaged around 58 percent, yielding about 1, 780 interviews per month.[1]
Periodicity of sample draw	Monthly	Unchanged
Questionnaire:		
Core time-use questionnaire	Same as in the original BLS pilot study, modeled after the Statistics Canada approach. Respondents are asked to report activity by activity, in sequence. For each activity reported, respondents are asked whom they were with, how long the activity lasted, and where they were.	In cognitive testing, problems occurred with the "Who was with you?" question when people were away from home. The question was changed to "Who was in the room with you?" when the respondent was at home and "Who accompanied you?" when he or she was away from home.
Secondary activities	The implicit assumption in the NAS report was that secondary activities would be collected and coded.	Secondary activities are collected only when volunteered and will not be coded, except as needed for research purposes. The exception is childcare: a summary question measures secondary care. BLS is examining secondary activities volunteered by respondents in 2003 interviews and will continue to examine how to better collect these activities.
Summary questions	Ask respondents to identify each recorded activity for which they were paid.	Summary questions were significantly expanded. Four types of summary questions were included in production: questions on childcare, paid work, volunteering, and time spent away from home for 2 or more consecutive nights in the previous month.
Updates to CPS questions	Update the following CPS variables: household composition, total family income, labor force status of the respondent and his or her spouse or unmarried partner, and information on the respondent's earnings and school enrollment.	Family income is not updated. Respondent's labor force status is updated, except for the series on reasons for being out of the labor force.

Exhibit 1. Continued—American Time Use Survey elements: a comparison of analysis at the National Academy of Sciences conference and changes as of full production

Concept	Analysis at National Academy conference	Changes as of full production
		Information on spouses' employment status (employed or not) and hours of work also are collected. Respondents are asked about whether they have children under 18 who do not live with them.
Modules	Allocate 5 minutes of the questionnaire to special-topic modules. Do not specify the topics for these modules.	Unchanged
Activity coding	Adopt a variation of the coding system from the time-use survey of the Australian Bureau of Statistics.	The ATUS coding lexicon originally strongly resembled that of the Australian Bureau of Statistics.
Survey operations	Conduct a pretest and 3 months of prefielding before full production.	An extensive operations test was performed, as were a 2-month dress rehearsal (pretest) and 4 months of prefielding.
Target response rate	Adopt a 70-percent target response rate.	Unchanged
Staffing and training	Ensure that interviewers have experience coding.	Required that all interviewers also code. Considered and recommended a dedicated ATUS staff, but did not implement one, due to budget constraints.
Data dissemination and publication plans	Initial table shells were developed.	Publication tables were developed for specific subject areas (for example, on unpaid work, leisure, and childcare), and a system was built to generate them. Public-use data files are being specified according to formats recommended by Andrew Harvey.[2]

[1] These numbers reflect data from January through December 2003. A 35-percent sample reduction was implemented in January 2004 to keep survey costs in line with the survey budget.

[2] Andrew Harvey, "Guidelines for Time Use Data Collection and Analysis," in Wendly Pentland and others, ed., *Time Use Research in the Social Sciences* (New York, Kluwer Academic/Plenum, 1999), pp. 19–46.

advice from outside groups, particularly the Federal Economic Statistical Advisory Council and the International Association of Time Use Researchers.

Survey estimation objectives. The primary and secondary objectives listed in exhibit 1 remained essentially unchanged, except for the expansion of the scope of the survey to include 15-year-olds. After generating table shells that summarized the time spent in a variety of activities, the working group started focusing on thematic tables that offered more detailed information on a variety of subjects, such as providing childcare, traveling, performing paid or unpaid work, volunteering, and participating in leisure activities. The table shells were developed on the basis of research areas brought to the group's attention in the conferences mentioned in this article, in other countries' time-use publications, and in meetings with future data users. A processing system was designed and deployed at the Bureau to generate the tables.

Periodicity of the survey. The National Academy report recommendation to draw the sample monthly did not change, but the survey administration plan was developed further. In the report, the working group suggested that the survey run for 14 months—2 months of prefielding and 12 months of production—and be followed with periodic time-use surveys. Budget process considerations had an impact on the final decision. It would have been very difficult, if not impossible, to secure funding for a time-use survey that would be conducted infrequently, because a continuous funding stream implies a continuous level of survey collection activity. Ultimately, instead of seeking funding for a time-use survey that would be collected, say, every 5 to 10 years, as is typical in most countries, a decision was made to seek funding for a continuous survey with sample building over time to permit more robust estimates and time-series analysis.

There also were discussions about whether the survey should be fielded evenly across the year and within months or whether the sample should be introduced in some months only or should be front loaded at the beginning of selected months. For ease of operation, and to represent all weeks and months equally across the year, a decision was made to introduce each month's sample evenly across 4 weeks. Each case would be called for up to 8 weeks. (See subsection titled "Survey operations" for a further rationale behind this decision.) Estimates, however, would be based on the date about which respondents were interviewed. (For example, first-quarter estimates represented interviews *about* January 1 to March 31, regardless of the sample month the cases were introduced.)

Reference period. The notion of asking someone to report, activity by activity, about the preceding day was the norm in international time-use data collection. This protocol was taken as a given by the working group. Assigning a single designated interview day to each respondent in advance was a favored methodology because it would help control the distribution of interviews across the week. Following the recommendations of previous time-use researchers,[11] the working group initially recommended that individuals who could not be contacted on their assigned interview day would be called on the same day of the following week and interviewed about the day before the interview (so that the diary day would always be the same day of the week). There was concern, however, that this one-day-per-week schedule, also known as a *designated-day-with-postponement schedule*, would result in low response rates. Empirical work was conducted to examine the possibility of allowing some form of substitution. For example, if research showed that people spent time on all weekdays in a similar way, a decision could be made to allow individuals to be called on *any* weekday, rather than requiring a single day-of-week assignment.

A first step in assessing the feasibility of this approach was determining whether time-use profiles on weekdays were similar enough to one another to allow substitution. Research using data from the Environmental Protection Agency Time Diary Study conducted by the University of Maryland in 1992–94 showed that the Monday through Thursday profiles were similar to one another, that Friday's was only slightly different from those of other weekdays, and that the profiles of the 2 weekend days were different from weekday profiles and different from one another.[12] On the basis of these findings, the working group concluded that Monday-through-Friday substitution would be acceptable. However, because Saturday interviews (about Friday) are easier to obtain than other interviews, experiments were conducted with Monday-through-Thursday substitution only.

One way to implement day-of-week substitution would be to use a *convenient-day schedule*—a schedule whereby respondents are called every day until they are interviewed or until an appointment is scheduled. There was concern, however, that this schedule could result in biased estimates because the probability of a day being selected as the diary day may be correlated with a respondent's time use. Generally, time-use researchers recommend using a designated-day over a convenient-day schedule, but there is very little empirical research to support that recommendation. A middle approach between a designated-day-with-postponement schedule and a convenient-day schedule is to use an every-other-day schedule, also called *designated day with postponement and substitution.*

To assess the potential bias associated with each of these contact schedules, Jay Stewart used computer simulations on mock time-use data to examine the impact on time-use estimates.[13] He looked especially at the robustness of the various schedules to alternative assumptions about the patterns of activities across the week. The study indicated that the

convenient-day schedule introduced systematic bias into estimates of the time spent in various activities. In particular, time spent in activities engaged in at home was underestimated, while time spent in activities engaged in away from home was overestimated. The designated-day-with-postponement-and-substitution schedule generally did not introduce bias, but it was not as robust as the designated-day-with-postponement (no substitution) schedule.

The final decision about assigning designated days was made after the 2001 operations test (described later). In one test group, respondents were assigned to either a Tuesday/Thursday or a Monday/Wednesday group (that is, they could report on either of the two days assigned), doubling the number of eligible days per field period. The operations tests showed that the availability of a second eligible day during the same week increased response rates about 4 percentage points over an 8-week period. However, with the number of contact attempts held constant, there was no difference between the designated-day-with-postponement and designated-day-with-postponement-and-substitution schedules. After 8 weeks, the designated-day-with-postponement schedule yielded 59 percent, about the same as the 60 percent yielded in 4 weeks with the designated-day-with-postponement-and-substitution schedule and with the same number of contacts. Also, there was more day-of-week variation in responses when substitution was allowed. Because costs are based largely on the number of contact attempts, there was no advantage to allowing day-of-week substitution.

Sampling. The early basic framework for the sampling plan was developed and presented in the report to the National Academy workshop. The sample frame was identified as individuals leaving the CPS who had successfully completed their final (month-in-sample 8) interview. Using a subset of the CPS sample yielded several benefits, including the following:

- Advance selection of survey respondents by their demographic characteristics permitted an efficient sample to be drawn (certain demographic characteristics, such as race, did not require screening);
- Familiarity with the construction of the sample permitted the removal of some design features, to maximize ATUS sample efficiency.

Using unweighted CPS sample counts from month-in-sample 8 files and time-use distributions reported by F. Thomas Juster and Frank T. Stafford[14] to develop parameters for estimating standard errors, Edwin Robison estimated the minimum sample size required to generate reliable estimates for the major subpopulations to be 12,000 per year.[15] Robison assumed that this sample size would produce 9,000 completed interviews. He also estimated that an additional 12,000 samples (9,000 interviews) would be required to produce estimates for smaller subpopulations specified in the survey's secondary objectives. In general, Robison estimated that 1,000 sample cases (750 interviews) in any particular cell would be needed to produce reliable estimates. To be conservative, the BLS-National Academy report recommended a slightly higher target for the sample: 21,000 completed interviews per year.[16] On the basis of the experience of Statistics Canada, which achieved an 88-percent response rate,[17] the Bureau set a conservative 70-percent target response rate. These sample size recommendations were used in conjunction with estimated Census production costs and BLS staff and research costs to estimate survey budget requirements.[18]

After funding was approved in late 2000, an interagency statistics team was formed to refine and finalize the sampling plan. Because the CPS was a household sample, the ATUS sample was stratified by means of household variables and was based on ensuring that reliable estimates could be made for minorities, labor force status groups (employed and not employed), and people with and without children. Labor market status and the presence of children are usually highly correlated with time use. The following stratification variables were chosen:

- Race and Hispanic origin of CPS householder (Hispanic; non-Hispanic, black; non-Hispanic, nonblack).
- Presence and age of children (under 6 years; 6 to 17 years).
- For households with no children, number of adults in the household (1; more than 1)

Sampling rates for each stratum differ in order to produce the desired sample size for various subgroups of the population and overall. The detailed reexamination of the sampling plan following the National Academy workshop led to the ultimate recommendation that the Bureau collect 2,000 completed interviews per month, or 24,000 completed interviews per year.

The questionnaire. The ATUS team members considered a number of issues in designing the ATUS questionnaire.

1. Core time-use questions. Many survey efforts require the development of a new survey instrument, a step that typically occurs early in the survey planning process. The time-use group had a draft partial questionnaire that had been developed from the 1997 pilot survey on the basis of some earlier surveys, particularly the Statistics Canada instrument.

ATUS questionnaire specifications were due to the Census Bureau shortly after the survey was funded, because software specifications, instrument programming, control systems development, and testing would take a long time to complete. The production plan included a summer 2002 dress rehearsal that required survey instruments to be ready well before full production. A draft questionnaire was submitted quickly, but work to refine the 2003 ATUS questionnaire continued until production began. The questionnaire needed to be refined for

several reasons: (1) the Census Bureau does not field untested questions; (2) the Bureau of Labor Statistics was committed to ensuring that questions were capturing the intended information; (3) results from tests and from the dress rehearsal led to many rewrites and retests of some questions; and (4) results from coding tests indicated that additional questions were needed to clarify some activities for coding (discussed later).

2. The time-use diary. The design of the time-use diary was fairly straightforward, because many paper diaries had been fielded in other countries and most used a grid with daily activities in rows and with associated information—who was with the respondent, where the respondent was, and how long the activity lasted—in columns. The Census Bureau software standard was Blaise, a package created by Statistics Netherlands. Blaise easily accommodated a grid structure, and the diary was programmed accordingly.[19]

3. Secondary activities. The enhanced version of the 1997 pilot questionnaire asked respondents not only what they were doing at a certain time, but also whether they were doing anything else at the same time. The pilot study showed that this version picked up more nonmarket work than the standard version, which did not directly address secondary activities.

At the time of the National Academy workshop, the Bureau recommended that a question about secondary activity be included in the survey, although there still was concern about the burdensome nature of asking this question after each recorded activity. Cognitive interviews indicated that many respondents wanted their secondary activities included in any measure of how they spent their time. However, many had difficulty specifying durations for these activities. In addition, it was not clear how to program the diary software to accept this additional information, and modifications to time computations in the software were extremely prone to errors. For the first year of production, it was decided that secondary activities would be collected (but not coded) only when respondents offered them. (The duration of an activity is collected for primary activities, but only the activity report is collected for secondary activities). Research on collecting data on simultaneous activities also was placed at the top of the research agenda during the first year of full production of the ATUS.

4. Work summary questions. Midway through the field period of the 1997 pilot test, researchers realized that the information that would be collected in the diary was insufficient for identifying and coding informal activities performed for income, such as making crafts for sale or babysitting. To supplement the existing information, a *summary* question—that is, a question that asked respondents to review in their minds the list of activities reported in the diary and identify one or more characteristics about each activity—was designed. The question asked respondents to identify each recorded activity for which they were "paid or expect[ed] to be paid." The additional information was used for coding. The pilot survey findings indicated that the question successfully identified income-generating events; the inclusion of a similar probe for coding purposes was thereupon recommended.

The questionnaire design team adopted this recommendation and considered additional questions as well, to better identify other types of work activities reported in the diary. The pilot survey question captured informal, income-generating activities, but did not clarify some activities that were done for one's job, but were not reported as "work," such as doing business paperwork or using the computer for work. In some cases, probes could be used during the interview to clarify activities. For example, interviewers were instructed to probe any reports of using the computer, asking "Was that done for work, school, or personal interest?" Still, customized probes could not be developed for all contingencies.

Lisa Schwartz designed a second phase of paid-work tests to determine whether the ATUS could clearly identify work-related activities, particularly of individuals who worked in nonstandard work environments or had nonstandard work hours, because they were more likely to report work in vague terms.[20] The test included cognitive interviews and debriefings with salaried workers, self-employed persons, multiple jobholders, and freelancers. From the results of this testing, a second question was developed and administered right after the diary and before the question about income-generating activities: "You said that you were working from [insert start time(s) of work episode(s) reported] to [end time(s)]. Were there any other activities that were done as part of your job (or business)?" This question was followed by "Which ones?" asked twice to multiple jobholders—once each for the main job and for any other job(s).

After many debates about what constituted "work" and what activities might be "related to work," but not actually work, coding rules were developed to direct how "yes" answers to the second question would be coded. Some activities would be coded as "work-related activities"; these included socializing, eating or drinking, and recreational activities (for example, taking a client to play golf) identified by respondents as done for their job or business. Others (for instance, grading papers) would be coded as work, because they were part of the respondent's job, but were simply not reported as "work" in the activity description. Finally, some activities, such as smoking and sleeping, would be restricted from being coded as work.

5. Summary questions on childcare. Several rounds of testing were required in order to develop summary questions that would enable the Bureau to accurately measure the time respondents spent with children in their care. The 24-hour diary successfully captured "active childcare" activities, such as feeding or bathing children, but the "Who was in the room with you?" question did

not sufficiently identify secondary childcare. For example, a respondent may have been alone in the kitchen, but also responsible for the care of children elsewhere in the home or yard. Conversely, a respondent may have had a child in the room, but not have been responsible for the child at that time.

Statistics Canada had used a summary-question approach to identify activities during which respondents had provided secondary care to children. The ATUS questionnaire design team used that question as a starting point and expanded it to a series of questions to measure secondary care provided to one's household children, to one's own children residing elsewhere, and to others' children.

The team spent a great deal of time determining the appropriate concept to measure, eventually agreeing that secondary care of children was characterized by the respondent's being in the general vicinity of at least one child under 13 and specifically near enough to that child to provide assistance if necessary. To determine wording that would elicit responses in line with this definition of secondary care, BLS cognitive researchers conducted two focus groups.[21] Participants were shown video clips of people providing this secondary care and were asked to describe it. From choices of terms presented to them, the group preferred "taking care of "and "looking after" one's children. They also offered a new term: "having children *in your care*." The design team thought that "taking care of" denoted more of a primary-care concept, and the diary had done a good job of capturing primary childcare activities (such as bathing or feeding children). The other two terms were tested in cognitive interviewing and the "in your care" wording was ultimately chosen.[22]

6. Summary questions regarding absences from home. Some concerns also had arisen about a systematic bias that would occur in the survey: because respondents were asked about "yesterday," activities done during absences from home of 2 or more days would not be collected. Debates initially focused on how the Bureau might be able to get this information, such as by asking a subset or a new set of respondents to take a paper diary on a trip and record activities or by asking respondents in the telephone survey about activities engaged in during recent trips. However, carrying out a separate protocol to get these data would have been costly, and asking about detailed activities on recent trips would likely present recall problems.

Eventually, the questionnaire design team settled on obtaining enough useful information to begin to understand the extent of the bias: information on how many trips people had taken and the primary purpose of those trips. Questions were written to elicit this information, and interviews were conducted with a group of research subjects for whom business travel records were available. This approach enabled the researchers to evaluate the accuracy of reports about trips. Research showed that accuracy declined as the recall period increased and as the number of trips taken increased. Respondents had little or no difficulty assigning primary purposes to their travel.[23] On the basis of the results of these tests, the Bureau decided to ask respondents only to report on trips taken during the month prior to their first eligible designated day.

Accordingly, the following questions were added to the survey:

> Now I'd like to ask a few, very general, questions about times when you may have been away from home for business, vacation, or other sorts of trips. How many times were you away from home in the month of [month prior to first designated day]? Only report times when you were away from home for 2 nights or more. Let's start with the most recent trip you took in "month" (e.g., October). What was the purpose of that trip?...How many nights were you [insert purpose]?[24]

7. Volunteering. During dress rehearsal and prefielding, Census Bureau coders reported difficulty in distinguishing between certain care and socializing activities, on the one hand, and volunteering activities, on the other. To clarify the distinctions involved, it became evident that a summary question on volunteering was required. Not long before, the Census Bureau had examined how to measure volunteering in a CPS supplement and had defined volunteering as unpaid work (except for expenses) done "for or through an organization." The CPS question on volunteering was adapted for the ATUS, with the reference period modified from the previous year to "yesterday": "Now I'd like to ask you a few questions about volunteer activities—that is, activities for which people are not paid, except perhaps [for] expenses. We only want you to include volunteer activities that you did for or through an organization. Yesterday, did you do any volunteer activities for or through an organization? Which [activities]?"

8. CPS updates. One of the most valuable advantages to using the CPS as the ATUS sampling frame is the wealth of information that is already known about respondents when they are selected for the survey. However, some pieces of information relevant to time-use analyses, such as a person's employment status, can change between the last CPS interview and the time-use interview. Accordingly, prior to the National Academy workshop, the questionnaire team discussed which elements of the CPS interview should be updated and examined whether other pieces of information should be collected during the time-use interview that would not be captured either by the basic time-use questionnaire or the update to the CPS elements. Respondent burden was considered in addressing these questions.

The team ultimately recommended that the survey should update the following CPS variables: household composition, total family income, labor force status of the respondent and

his or her spouse or unmarried partner, and earnings and school enrollment information about the respondent. After funding of the ATUS, the CPS questionnaire and skip patterns were examined in detail in order to understand the impact of these decisions on software development. All the questions and skips included in the ATUS would need to be reprogrammed for its data collection instrument, which was written in a language different from that of the CPS instrument. ATUS team members from the Census Bureau requested that unnecessary sections be excluded to reduce the programming burden. The team decided not to update the family income variable, because it is only a set of ranges and a decision had already been made to update the respondent's earnings. Questions on job search methods of the unemployed were retained, but the branch of the labor force status questions that distinguished reasons for being out of the labor force was not. A new question that would be asked in the ATUS would elicit information on the age and sex of all of the respondent's own children (under 18 years) who did not live with him or her.

9. Modules. Modules consisting of a series of questions on a specialized topic added at the end of the questionnaire hold the promise of allowing researchers to explore more fully social and economic issues related to time use. Modules also can be used to address data limitations resulting from some of the decisions made by the ATUS team members and described herein. For example, modules can be used to measure family allocation of time, asking the respondent questions about the time use of household members. In the National Academy report, the Bureau advocated the inclusion of 5-minute modules within the framework of an estimated 30-minute total interview. To avoid introducing added complexity during the first, stabilizing year of the survey, it was agreed that no modules would be implemented before January 2004 (1 year into production).

BLS thinking on ATUS modules remains basically unchanged since the National Academy workshop. Criteria for acceptable modules have been specified in a policy and include the following: only the designated person may be surveyed; the subject area must have some relevance to time use; and the module must run for at least 6 months.[25]

Coding. The ultimate value of time-use data depends on the breadth, depth, and consistency of the activity classification system. Each activity is assigned a three-tiered activity code, using a detailed classification system and accompanying rules.

In describing the working group's early recommendations regarding activity codes, Linda Stinson noted that most of the existing activity classification systems evolved from the original structure developed by Alexander Szalai for the Multinational Time-Use Project of the 1960s.[26] The time-use group decided to select an existing classification system as a base in order to benefit from previous tests and code revisions, thereby saving time and money. The working group initially examined the Eurostat classification system, which had been used by 18 countries at that time; the Australian system, which had modified some categories with the measurement of "unpaid work" in mind; and the United Nations' System, which had a basic framework compatible with the U.N. System of National Accounts. The National Academy report recommended a slightly modified version of the Australian system, which was quite detailed and best reflected the type of economy and activities engaged in in the United States.

After funding of the ATUS, an interagency coding team customized the system further, to include activities unique to the United States, to remove some unique to Australia, and to ensure that the activities mentioned were consistent with a fourfold typology of time developed by Dagfinn Ås.[27] This lexicon was then submitted to members of the International Association of Time Use Researchers and to a team of BLS cognitive psychologists for review. During the review process, many took issue with the new fourfold typology that grouped activities into "necessary," "committed," "contracted," and "free." Most thought that the overall framework was appealing, but they noted numerous exceptions that could be made to the rules. As a result, the use of these rules as a guiding principle was dropped. However, categories were still maintained in a way that users easily can combine them to represent the four concepts involved.

The coding team found that international comparability across systems was not as simple as had been expected. Even such seemingly straightforward activities as eating were coded differently in different countries. For example, some countries coded eating in restaurants as socializing (and therefore occupying "free" time), while others coded such eating as just that—eating (occupying "necessary" time). Andrew Harvey, president of the International Association of Time Use Researchers, confirmed that international comparability at detailed levels did not exist. Still, two systems that harmonize time-use data at aggregate levels across countries have been developed, and those working on the ATUS are collaborating with the designers to be sure that U.S. data are included.[28]

The removal of the comparability constraint freed up the coding team to change its focus from revisions of the lexicon to usability by the coder (ability to locate the right code) and enhancement of the analytical value of the survey. Toward the last of these ends, the proposed three-tiered, three-digit system, which allowed 9 categories within each tier, was replaced with a three-tiered, six-digit system that allowed up to 99 categories in each tier. This system is more flexible than a three-digit system, because it can accommodate the introduction of new codes.

To implement recommendations from the team of research psychologists, the ATUS team conducted several usability tests of the coding system with Census Bureau coders. Ultimately, three separate coding tests were conducted at the Census Bureau, each one introducing a revised lexicon and more

extensive training than the first, and the last test introducing coding software.[29] These tests were highly productive and led to both small and large changes in the classification system, including the following:

- Removal of the "activities related to goods and services" category present in many time-use classification systems. Coders did not associate this title with the elements it included, such as grocery shopping and purchasing medical services. The category eventually expanded into four largely purchasing categories, such as "consumer purchases" and "professional services."
- Removal of the "media use" category, because many did not think of television, radio, and other media together in one category. Separate categories were developed for each type of media use.
- Removing and revising ambiguous examples under various categories.
- Agreeing on the best location or conceptual definition for questions on many difficult-to-code activities, such as "looking for things" and "waiting for [something or someone]."

In the fall of 2001, the Bureau worked with Westat, a private research firm, to conduct an additional, larger scale test designed to measure coding accuracy and efficiency over time (returns to experience) and to evaluate BLS training in coding. The test involved nine coders with a wide range of experience coding other survey data. The test showed that coding speed increased rapidly with experience, and coding accuracy increased as well, though not as quickly. Westat made a number of recommendations to improve the classification system, the coding software, and the training. Most were adopted.[30]

The coding tests, as well as work at the Bureau to specify coding rules and analytical tables, routinely pointed out difficult-to-code activities. Some of the most difficult categories were travel, waiting, packing and unpacking things, work-related activities, helping others, and computer use. After the tests, much work was done during 2002 to address these issues; among aspects of the coding system that were revised were coding categories, coding subcategories, and, particularly, rules and job aids for training. A review of the proposed system, including how it compared with several other countries' systems,[31] led to a number of important changes in the classification system. As mentioned earlier, difficulties distinguishing between care, socializing, and volunteering made it clear that a summary question on volunteering needed to be added to the ATUS. Systems were specified and developed to run coding operations, including verification and adjudication processes that required a second coder to assign a code to each activity and an adjudicator to rule on the correct code. Feedback from the dress rehearsal and prefielding activities also was used to modify the system, right up to production. Ultimately, a system with the following 17 top-tier categories was developed:

- Personal care
- Household activities
- Caring for and helping household members
- Caring for and helping non-household members
- Work and work-related activities
- Education
- Consumer purchases
- Purchasing professional and personal care services
- Purchasing household services
- Obtaining government services and civic obligations
- Eating and drinking
- Socializing, relaxing, and leisure
- Sports, exercise, and recreation
- Religious and spiritual activities
- Volunteer activities
- Telephone calls
- Traveling

Survey operations. A few specifics of the survey operations were discussed in the development of the sampling objectives and were suggested in the National Academy report. Telephone interviewing was a starting assumption. A subsequent recommendation was made to use a designated-day methodology with 4 weeks of callbacks, doubling the length of the 1997 pilot study reference period. The various recommendations provided a beginning set of operational assumptions, but a great deal of work remained.

A BLS-Census field-test team was chartered to recommend detailed ATUS operations. The team was particularly concerned about how to fulfill the difficult and unprecedented requirement that the Census Bureau contact a specific household member on a predesignated day. While the 1997 pilot study provided guidance on extending the calling period, it was not clear how many calls should be made over how many weeks to achieve the 70-percent response rate target and how different mail-out or day-of-week substitution techniques might affect the survey results.

Using 3,200 cases from the outgoing rotation groups of the CPS, the field-test team designed three experiments that were run concurrently by the Census Bureau in April through June of 2001. The 1997 pilot results indicated that efforts would need to be made to increase both contact rates (reaching the designated person) and response rates (gaining cooperation). Thus, the studies focused on maximizing these two objectives, rather than on collecting codable activity data. A paper questionnaire was developed that included both a short diary (from 4 A.M. to noon) administered by phone and debriefing questions designed to provide insight into contact- and response-related issues.[32] The effects of the following methods on contact, response, and costs were studied:

- *Priority mail*: All respondents received an advance letter and brochure from the Census Bureau. Some received the materials by priority mail, while others received them by regular mail.
- *Substitution*: Some respondents had the option of substituting between 2 eligible days per week (either Monday/Wednesday or Tuesday/Thursday), while others were eligible to report on a specific weekday only.
- *Proactive appointment setting*: Some respondents were called in advance of their interview day and were asked to set an appointment. Others were called only on their interview day.
- *Field visits as opposed to calling*: Some respondents were called for up to 8 weeks; others were called for up to 4 weeks and then were visited for up to 4 more.
- *Incentives*: Respondents were divided into three incentive groups—those who received no incentive, those who received a debit card for $20, and those who received a debit card for $40. Those who received debit cards were given the PIN number if they completed the survey.

Two tests covered all of the variables just listed and were carried out with the 95 percent of the sample for whom the Census Bureau had telephone numbers. An additional study was developed for the 5 percent of the sample for whom the Census Bureau had no phone number. (Most had responded to the CPS in personal-visit interviews.) This group received a $60 debit card, and their letter asked them to call the toll-free number of the Census Bureau to respond. They had up to 4 weeks to call in and complete an interview; those who had not done so were visited on their designated interview days for up to 4 more weeks in an attempt to secure an interview.

Response rates varied a great deal across the treatment groups. The highest were achieved with larger incentives and with field visits, both expensive operations. Incentives also sped response; for example, a 70-percent response rate was achieved in only 2 weeks with a $40 debit card; with no incentive, a 69-percent response rate was reached after 8 weeks. To analyze the data and make operational choices, contact rates, response rates, and costs were examined for each methodology. The following operational choices were made:

- *Priority mail would be used.* Priority mail appeared to be highly effective in reaching respondents, and the costs were relatively small.
- *Field visits would not be made.* Field visits increased response by about 4 percentage points, compared with a full-CATI operation. However, they were prohibitively expensive and would require training interviewers across the country rather than in one location.
- *Proactive appointment setting would not be used.* Calling in advance to set an appointment did not increase response. It did, however, increase costs.
- *Incentives would be used only for households whose telephone numbers the Census Bureau lacked.* When costs came in, it was clear that the Bureau would not be able to afford incentives for each case. The shorter field period required to get to 70 percent did not reduce costs enough to offset the cost for incentives, even with a reduced face value. As a result, an 8-week field period and a no-incentive protocol were chosen for households for which the Census Bureau had a recent phone number. Incentives were chosen for households for which the Census Bureau lacked such a number. A $60 incentive induced 41 percent to complete the survey. Because this group included underrepresented demographic groups, and because survey advisors (including the Federal Economic Statistical Advisory Council) felt strongly that those groups should be included in the sample, a $40 incentive was implemented for full production.[33]
- *Substitution would not be used.* It was somewhat surprising that the availability of a second eligible day during the week increased response rates by only about 4 percentage points over an 8-week period. Substitution was not implemented because it did not reduce costs and it increased the variability of responses across days of the week.

Staffing and training. The National Academy report suggested that it would be desirable for interviewers to have experience with the coding system. As preparation for full production continued, the necessity of this approach was confirmed. It became clear that the number of probes that were needed in the interview to allow correct coding of activities expanded significantly with the development of the coding lexicon. To collect high-quality time-use data, an interviewer must listen to subtle cues from the respondent and remember to probe when necessary to obtain enough detail to code activities. In most surveys, interviewers read questions verbatim. In the diary portion of the ATUS, they must instead conduct a "conversational interview," taking in information as it is provided by the respondent and probing when necessary.

There was concern that it might be difficult to find people who were inclined to do both tasks. This hypothesis was tested for the first time in the dress rehearsal; debriefings with Census Bureau interviewers indicated that they thought that activity-coding experience not only was important and enjoyable, but was critical to conducting good time-use interviews. For similar reasons, the BLS-Census Bureau oversight team also thought that the ATUS should have a dedicated staff. However, the prohibitive cost of maintaining a dedicated staff necessitated allowing interviewers to work on other surveys as well as the ATUS. In production, interviewers are required to code, and extensive training and certification is mandatory for everyone working on the survey.

The difficulty of the interview and of coding influenced approaches to training. Dress rehearsal and prefielding experiences indicated that training in the rules of coding should be provided prior to training in interviewing techniques. The Bureau contracted with a vendor to develop a training package that the call center staff could deliver easily without assistance from headquarters. The developer included an extensive audio feature in the computer-based training, given that the CATI interview required skills in listening and immediate, customized probing.

Data dissemination and publication plans. To develop its initial table specifications, the working group examined publications based on other time-use surveys, as well as BLS reports that used CPS demographic and labor force data. Work on tables has continued since then. Meetings with advisory groups and with outside users provided information on the types of analyses planned. Tables were developed by subject area groupings, including childcare, unpaid work, travel, and leisure. The Bureau published a subset of these tables in September 2004, through a news release. The data are available to users online at the BLS website.[34] Data were presented through several concepts, including time spent doing an activity and the proportion of the population that engaged in a particular activity on an average day. Most tables included tabulations by demographic characteristics or labor force status.

Many time-use users will be interested in microdata files. The data file formats are still in development, but most likely will adhere to recommendations by Andrew Harvey that call for the following three types of files:[35]

- *Episode file.* Contains episode-level information for each activity (such as the activity code, who was present when the respondent engaged in the activity, and where the activity occurred.)
- *Respondent summary file.* Contains summary information on each respondent (such as age, sex, and cumulative time spent in various activities at various locations).
- *Time-points file.* Contains the activity codes for activities performed at prespecified intervals during the day (for example, at 5 P.M., the respondent was eating; and at 5:15 P.M., the respondent was doing the dishes.)

The current plan is to produce SAS and ASCII microdata files for distribution through the BLS website.

Update since January 2003

A number of important changes were made to the ATUS after several months of production and continued research.

Response rates. Response rates for cases in the panels for 2003 came in substantially below the 70-percent targeted rate. The response rate for households for which the Census Bureau has a telephone number was 58 percent, while the rate for households for which the Census Bureau has no telephone number was 33 percent. (These households called in to complete the interview.) A number of parallel efforts, including the establishment of a response rate investigation team at the Census Bureau, were put in place to investigate the cause of the low response rates. The team examined calling and response patterns by interviewer, time of day, and respondent characteristics to influence targeted methods for improving response. In January 2004, a response analysis survey was conducted with about 50 respondents and 40 nonrespondents to determine their reasons for participating in the ATUS or declining to participate in the survey. The study also solicited suggestions for improving the survey materials, the interview, or the contact protocol. In addition, the Bureau of Labor Statistics is conducting an examination into whether, and to what degree, nonresponse bias exists in ATUS estimates.

Secondary activities. Proposals were solicited from outside vendors as to how to identify the best way to measure secondary activities. Among the proposals were tests that required substantial software changes if the results were successful. For example, new time computation fields would need to be added to the ATUS diary for the duration of the secondary activities, and new screens would need to be added for cases in which the respondent could not determine the length of the activity, but could provide a range for its duration. Before embarking on this extensive research into collecting information on all secondary activities, the Bureau decided to examine the reports of volunteered secondary activities to determine whether a more targeted approach to measure *some* secondary activities might be more effective than an approach that would seek to measure *all* secondary activities. This research will begin in 2005.

Reduction in the sample size. Once the survey was in full production, actual costs could be measured. They showed that the cost of maintaining the initial sample size (about 3,375 cases per month) exceeded the ATUS budget. In the first year, savings from development years paid the full survey costs. However, in order to bring costs in line with the annual survey budget for future years, the monthly sample had to be reduced by about 35 percent, to 2,200 cases per month. The Census Bureau computed variances under several sample reduction strategies. The Bureau of Labor Statistics implemented an evenly distributed reduction across all stratification groups, rather than a reduction in targeted groups only, because the first approach minimized increases in variances for overall time-use estimates. The reduction was implemented in January 2004.

THIS ARTICLE HAS TRACED THE DEVELOPMENT of the American Time Use Survey from its inception in 1991 as an

issue of statistical policy interest to its implementation in January 2003 as a new monthly survey sponsored by the Bureau of Labor Statistics. Along the way were healthy debates over the choice of one individual per household as the survey respondent, the cognitive research that led to the inclusion of various summary questions, the transition to full production, and a description of the future work that remains.

The development of the ATUS represents a coalescence of work that includes academic inquiry and debate, survey methodological design, operational testing, production management, and a strong and growing consensus among government agencies as to the need for the kinds of data the survey captures. Many individuals were involved in this process. Some contributed through advisement at the MacArthur or National Academy conferences or at the Federal Economic Statistical Advisory Council meeting or other advisory meetings, through contractual relationships, or through projects and conferences sponsored by the International Association of Time Use Researchers. Others worked at the Bureau of Labor Statistics or the Census Bureau designing and running tests, securing funding for the project, building and testing software, providing training, conducting interviews, and coding activities. Former BLS Commissioner Katharine Abraham, under whose leadership much of the early work and the securing of funding were completed, was critical to the endeavor, as was current BLS Commissioner Kathleen Utgoff, who continued to support the project. Finally, the ongoing interest and support of the National Academy played a key role as well. □

Notes

[1] Michael Horrigan, Maury Gittleman, Mary Joyce, and others, *The Measurement and Valuation of Unpaid Work*, Report of the BLS Working Group (Bureau of Labor Statistics, 1993).

[2] *Platform for Action*, Report from the Fourth World Conference on Women (Beijing, United Nations, 1995).

[3] Linda Stinson, Angie Becher, Barbara Forsyth, and Kerry Levin, *Using a time-use approach to measure the frequency and duration of non-market work*, BLS internal report (Bureau of Labor Statistics, 1998).

[4] *Agenda for the Conference on Time Use, Non-market Work, and Family Well-Being* (Washington, DC, Bureau of Labor Statistics and the MacArthur Network on the Family and the Economy, 1997).

[5] William Nordhaus, remarks made in "Session VI: Time-Use Surveys: Where Should the BLS Go from Here?" in Lynn Hatch, ed., *Summary of the Conference on Time Use, Non-market Work, and Family Well-Being* (Washington, DC, Bureau of Labor Statistics and the MacArthur Network on the Family and the Economy, 1997).

[6] Numerous other important lines of inquiry were explored at the conference in addition to the two reported here, although those two themes figured prominently in the group's thinking in the next phase of the methodological development of the survey. Other notable points for discussion included a comparison of alternative coding systems and research on reporting both activities and one's emotional state at multiple times during the day.

[7] Bureau of Labor Statistics Time-Use Survey Working Group, *A Report on the Feasibility of Conducting a Time-use Survey*, paper presented at the National Academy of Sciences workshop on Time-Use Measurement and Research, Washington, DC, 1998.

[8] See the following *Monthly Labor Review articles:* Mary Joyce and Jay Stewart, "What can we learn from time-use data?" August 1999, pp. 3–6; Anne E. Winkler, "Measuring time use in households with more than one person," February 2002, pp. 45–52; and Lisa K. Schwartz, Diane Herz, and Harley Frazis, "Measuring intrahousehold allocation of time: response to Anne E. Winkler," February 2002, pp. 53–59.

[9] Statistics Canada's report was presented at the National Academy's workshop. (See Lorna Bailie, "Remarks made in 'Session VI: Time-Use Surveys: Where should the BLS go from here?" in Hatch (ed.), *Summary of the Conference*.)

[10] Linda Stinson, *Measuring How People Spend Their Time*, paper presented at the American Statistical Association meetings, Washington, DC, August 1999.

[11] Brian L. Kinsley and Terry O'Donnell, "Marking Time: Methodology Report of the Canadian Time Use Pilot Study—1981," in *Explorations in Time Use*, vol. 1 (Ottawa, Department of Communications, Employment and Immigration, 1983); Graham Kalton, "Sample Design Issues in Time Diary Studies," in F. Thomas Juster and Frank T. Stafford, eds., *Time, Goods, and Well-Being* (Ann Arbor, MI, University of Michigan, Institute of Social Research, 1985), pp. 333–51; Ingrid Lyberg, "Sampling, Nonresponse, and Measurement Issues in the 1984–85 Swedish Time Budget Survey," in *Proceedings of the Fifth Annual Research Conference* (Bureau of the Census, 1989), pp. 210–38; and Andrew Harvey, "Guidelines for Time Use Data Collection and Analysis," in Wendy Pentland and others, eds., *Time Use Research in the Social Sciences* (New York, Kluwer Academic/Plenum, 1999), pp. 19–46.

[12] Jay Stewart, "Alternative Indexes for Comparing Activity Profiles," paper presented at the 2000 conference of the International Association for Time Use Research, Belo Horizonte, Brazil, 2000.

[13] *Ibid.*

[14] Juster and Stafford, eds., *Time, Goods, and Well-Being*.

[15] Edwin Robison, *Sampling and Reporting in Time-Use Surveys*, paper presented at the American Statistical Association meetings, Washington, DC, August 1999.

[16] Bureau of Labor Statistics Time-Use Survey Working Group, *A Report on the Feasibility*.

[17] Statistics Canada's time-use surveys were conducted as add-ons to that nation's General Social Survey in 1992 and 1998 and were not independently fielded.

[18] Robison, *Sampling and Reporting*.

[19] The questionnaire design team deliberated the order of the questions for some time. CPS updates that were essential to the administration of the diary were placed before the diary questions began. Other CPS updates were placed after the diary and summary questions, because they were deemed less important to collect than the diary information. The most sensitive questions—on earnings—were placed at the end of the questionnaire in case they triggered a refusal to answer.

[20] Lisa K. Schwartz, "The American Time Use Survey: cognitive pretesting," *Monthly Labor Review*, February 2002, pp. 34–44.

[21] Linda Stinson, *Report on Cognitive Testing Phase 1: The American Time Use Survey Summary Questions*, BLS internal report, 2000.

[22] Lisa Schwartz, "Minding the Children: Understanding How Recall and Conceptual Interpretations Influence Responses to a Time-Use Summary Question," unpublished internal paper, BLS Working Paper Series (Bureau of Labor Statistics, 2001). At the same time that the first round of questions was asked about childcare, a set of cognitive interviews was conducted with caregivers in an attempt to determine ways to measure time spent providing dependent adult care activities as a secondary activity. (See Stinson, *Report on Cognitive Testing Phase I.*) The wording of the question adopted was similar to that used in the childcare interviews:

> In addition to the activities you just told me about, we are interested in finding out about the time you spent looking after adults and children 13 and older who cannot take care of themselves because of a physical or psychological problem. Yesterday, did you spend any time looking after anyone living in the household 13 or older who cannot or should not be left alone because of a physical or psychological problem? Please tell me when you were looking after [name].

Testing indicated that the question had numerous problems. Chief among them was the recognition that the terms "care," "adults," and "disabilities" were unclear to, and interpreted differently by, respondents. In addition, some respondents did not like the "should not be left alone" language for adults, because many adults needed care, but could also be left alone. Some found "looking after" pejorative. The alternative terms "keeping tabs on" and "monitoring" were also rejected, the former possibly implying that the adults were wrong or untrustworthy, the latter having too clinical a tone.

Recognizing the complexity of defining questions to measure disability—a multiyear process is taking place at the Bureau to develop a series of questions to do just that—a decision was made to defer the development of questions to measure care of disabled adults to a later date. The current focus has shifted to measuring care of adults as a primary activity and to developing a series of questions to identify overall time spent providing "eldercare," a more restrictive concept.

[23] Schwartz, "The American Time Use Survey."

[24] Because of programming difficulties, these data will not be available until 2005.

[25] "ATUS Module Policy," BLS internal document.

[26] Alexander Szalai, *The Use of Time: Daily Activities in Urban and Suburban Populations in Twelve Countries* (The Hague, Mouton, 1972); cited in Stinson, *Measuring How People Spend Their Time.*

[27] Bureau of Labor Statistics Time-Use Survey Working Group, *A Report on the Feasibility.* Dagfinn Ås (1920–77) was a leading time-use researcher who was one of the planners of a multinational time-use budget study conducted in the 1960s. He was Norwegian.

[28] The Multinational Time Use Study was launched in the 1980s by Professor Jonathan Gershuny of the University of Essex in the United Kingdom. The idea was to create a cross-national and historical archive of time-use data sets. All the data sets in the archive have been harmonized into a common set of variables, including time-use activities and various demographic and socioeconomic characteristics of respondents. The harmonized file currently contains 35 different surveys from more than 20 countries, as well as 41 time-use activity codes. The development of these common activity codes was itself constrained by the richness (or sparseness) of activity codes in the original surveys. In recent years, on the basis of some 20 surveys having been carried out since 1999, an alternative harmonized time-use activity schema has been developed as part of the Harmonised European Time Use Study. (Visit **http://www.iser.essex.ac.uk/mtus/index.php** on the Internet.)

[29] Kristina Shelley, "Activity Coding in the American Time Use Survey: A Report of 3 Tests," BLS working paper, 2004.

[30] *Final Report: Research Services for Usability Testing and Lexicon Evaluation: The American Time Use Survey* (Rockville, MD, Westat, 2001).

[31] Anne Gauthier, *BLS 2003 Codes of Activities: Comparisons over Time and across Nations*, draft report, 2002.

[32] Detailed test designs are described in Karen Piskurich, Dawn Nelson, and Diane Herz, "Maximizing Respondent Contact in the American Time Use Survey," in *Proceedings of the 2001 American Association of Public Opinion Research Conference* (2001).

[33] The $40 amount was chosen because respondents indicated in the debriefing section of the test that $20 was too low and $50 was too high.

[34] **www.bls.gov/tus**.

[35] Harvey, "Guidelines for Time Use."

Work-related multiple-fatality incidents

Multiple-fatality work-related incidents claim the lives of 1 out of 10 fatally injured workers and include some of the worst occupational catastrophes: air crashes, bombings, fires, and explosions; using multiyear data, the Bureau of Labor Statistics takes a first-time-ever look at this infrequently occurring phenomenon

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Nine out of every 10 fatally injured workers die in an incident in which they are the only decedent. In these instances, there is one fatal incident and one fatality associated with it. But for the remaining 10 percent of worker fatalities, the fatal incident claimed the lives of more than one worker. These incidents are of particular interest to safety professionals and hazard researchers because the prevention of each such incident translates into the preservation of multiple lives.

The Bureau of Labor Statistics (BLS) Census of Fatal Occupational Injuries (CFOI)[1] identified 1,109 instances in which two or more workers died of injuries sustained in the same job-related incident during the 1995–99 period. These incidents claimed the lives of 2,949 workers. Although multiple-fatality incidents account for only 4 percent of all fatal incidents, nearly 10 percent of fatally injured workers die therein. As the following tabulation shows, almost three-quarters of these incidents involve only two fatalities, but the nine worst catastrophes claimed a total of 266 workers' lives:

Fatalities per incident	*Incidents*	*Fatalities*
Total	1,109	2,949
2	828	1,656
3	157	471
4	71	284
5 to 9	44	272
10 or more ...	9	266

One way to measure multiple-fatality incidents is by the average number of fatalities per incident. Overall, multiple-fatality incidents average three fatalities per incident. Federal Government multiple-fatality incidents average four fatalities.

The number of multiple-fatality incidents is relatively stable from year to year; from 1995 to 1999 it averaged 222, with each year varying from this average by less than 15 percent. But, because a single incident, such as a commercial jetliner crash or the bombing of a major building, might involve a large number of fatalities, the number of associated fatalities fluctuates from year to year to a greater extent than does the number of multiple-fatality incidents.[2] By combining data

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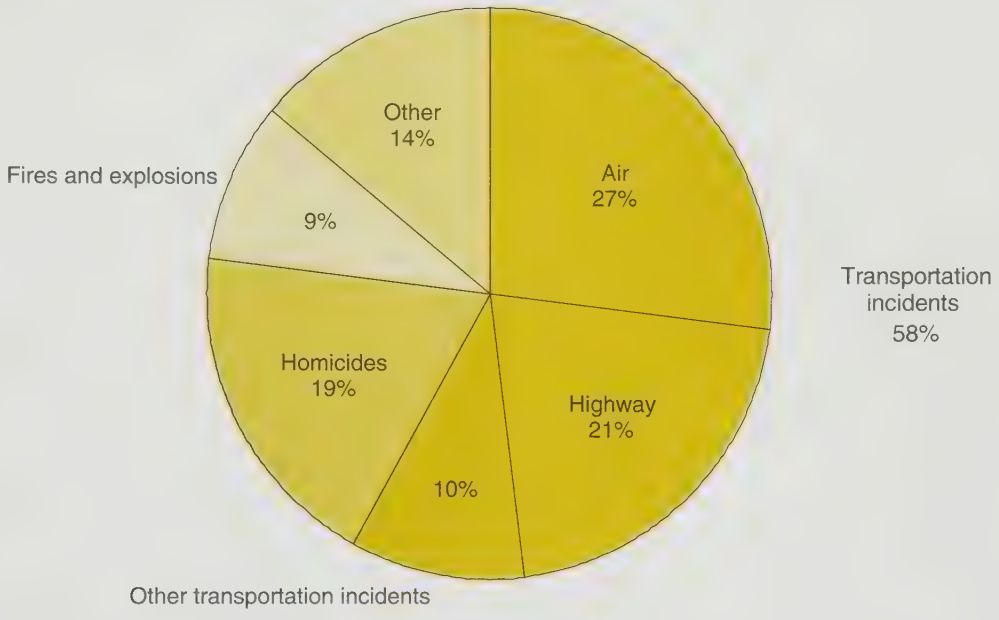
Chart 1. How workers die in multiple-fatality incidents, 1995–99



SOURCE: Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

for 5 years, any such fluctuations can be sufficiently mitigated to ensure a meaningful analysis. As the following tabulation shows, the number of associated fatalities in each of the 5 years from 1995 to 1999 varies less than 20 percent from the 590 annual average for this period:

Year	*Fatality incidents*	*Fatalities*
1995–99	1,109	2,949
1995	231	694
1996	194	551
1997	222	540
1998	227	550
1999	235	614
Average	222	590

How workers die in multiple-fatality incidents

Chart 1 illustrates how workers die in multiple-fatality incidents. Nearly three-fifths die in various kinds of work-related transportation incidents, almost half of which are air crashes and nearly two-fifths of which are highway incidents. Homicides, accounting for one-fifth of deaths in multiple-fatality incidents, are next. Fires and explosions account for less than one-tenth of such fatalities.

Multiple-fatality incidents occur in varying degrees in almost all event or exposure categories,[3] but in some such categories they account for larger or smaller shares than overall. Table 1 shows, for selected event or exposure categories, the percentage of overall incidents involving more than one fatality and the percentage of overall fatalities attributable to such incidents. To illustrate, multiple-fatality transportation incidents make up 5 percent of fatal transportation incidents overall and account for 13 percent of workers who die in transportation incidents. Because multiple-fatality incidents, by definition, involve two or more fatalities, the percentages of fatalities associated with such incidents are larger, for each event or exposure category, than the corresponding percentages of multiple-fatality incidents.

Table 1 shows that three-fifths of workers who die in air crashes, three-fifths who perish in water vessel casualties, and three-tenths who die in fires do so in incidents claiming the lives of more than one worker, whereas multiple-fatality incidents are rare for contact with objects and for falls. Nevertheless, some injury categories in which a high proportion of worker fatalities is associated with multiple-fatality incidents do not involve a high number of overall worker fatalities. Water vessel casualty fatalities and fire fatalities, for example, each account for less than 2 percent of overall fatalities. Conversely, some situations are highly unlikely to involve multiple fatalities.[4]

Table 1. Multiple-fatality incidents as a percentage of overall fatal incidents, and fatalities as a percentage of overall fatalities, by selected event or exposure, 1995–99

[Percent of total for event or exposure]

Event or exposure	Incidents	Fatalities
Multiple fatalities	4	10
Fires and explosions	11	26
Fires	13	30
Explosions	10	22
Transportation incidents	5	13
Air crashes	33	61
Water vessel casualties	36	61
Head-on highway collisions	9	17
Assaults and violent acts	4	11
Exposure to harmful substances	3	7
Contact with hot objects or substances	8	16
Confined spaces[1]	13	24
Contact with objects and equipment	1	2
Contact with overhead power lines	5	10
Nontrenching cave-ins, avalanches	14	24
Collapsing structures	8	17
Falls	1	2

[1] Includes fatalities which occurred in structures that do not meet the definition of permit-required confined spaces contained in Occupational Safety and Health Administration regulations.

Even though multiple-fatality incidents, by definition, involve two or more fatalities, it is possible for subcategories of such incidents to average fewer than two fatalities per incident. For example, for the "worker struck by a vehicle, mobile equipment" category, in which there were only 50 fatalities spread over 27 incidents (or 1.85 fatalities per incident), the average was fewer than 2 fatalities per incident. Such an outcome is, however, possible only because of the characteristics of the fatalities constituting each multiple-fatality incident. For instance, suppose a truckdriver runs over a road crew member and then collides with a jersey barrier, killing them both. In this multiple-fatality incident involving two workers, there was only one in each of the two occupations involved.[5] A murder-suicide is similar: there is usually only one suicide in multiple-fatality murder-suicides, because the perpetrator murders one or more others and then commits suicide.

Transportation incidents. Chart 1 and table 2 show that nearly three-fifths of multiple-fatality incidents and fatalities involve transportation, due primarily to head-on highway collisions and incidents involving air and water vessels. Other highway incidents, nonhighway incidents, and pedestrian fatalities actually account for a smaller share of fatalities in multiple-fatality incidents than their shares of overall fatalities.

As the following tabulation shows, although there are more multiple-fatality highway incidents than multiple-fatality air crashes, air crashes account for more fatalities:[6]

Transportation mode	*Incidents*	*Fatalities*
Total	641	1,709
Aircraft	248	805
Highway vehicle	284	633
Watercraft	60	161
Rail vehicle	24	54
Pedestrian struck by vehicle	27	50

The reason for the prominence of air crashes in multiple-fatality counts is that aircraft average three decedents per multiple-fatality incident, compared with two for multiple-fatality highway incidents. Of the 9 incidents involving 10 or more fatalities, for example, 7 were air crashes. More than one worker is killed in a third of all work-related fatal aircraft incidents, whereas three-fifths of all aircraft-related work fatalities take place in multiple-fatality incidents.

Collisions account for about half of highway incidents and fatalities overall, but two-thirds of multiple-fatality highway incidents and fatalities. Half of multiple-fatality highway collisions involve vehicles moving in opposite directions (head-on collisions), compared with a third for single-fatality incidents, whereas noncollision incidents, such as jackknifings, account for a smaller share of multiple-fatality highway incidents than single-fatality highway incidents. Multiple fatalities may be more likely to result from head-on collisions because they place the occupants of both vehicles at risk of fatality and because the speed with which the vehicles collide is the sum of the speeds at which each is traveling.

As with air crashes, multiple-fatality water-vessel incidents average three decedents per incident. Workers in water vessels are especially vulnerable to multiple-fatality incidents because they usually have multiperson crews and they operate far from assistance in often hostile seas. In icy water without a wet suit, hypothermia can result in death in 6 or 7 minutes. Accordingly, Alaska accounted for one-quarter of the multiple-fatality water-vessel fatalities.

Multiple-fatality incidents are particularly prevalent in vessel casualties.[7] More than one-third of incidents involving vessel casualties are multiple-fatality incidents, which constitute three-fifths of all fatalities from vessel casualties. Of the 252 overall vessel-casualty fatalities, 153 were attributable to 56 of the 155 overall vessel-casualty incidents. Sinkings and capsizings associated with 43 of those 56 incidents accounted for 119 of the 153 fatalities.

Assaults and violent acts. Assaults and violent acts account

Table 2. Multiple-fatality occupational injuries by event or exposure, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Total	1,109	100	2,949	100
Transportation incidents	641	58	1,709	58
Highway	284	26	633	21
Collision between vehicles, mobile equipment	184	17	417	14
Reentrant collision	3	–	17	1
Moving in same direction	23	2	51	2
Moving in opposite directions, oncoming	98	9	206	7
Moving in intersection	36	3	79	3
Moving and standing vehicle, mobile equipment—in roadway	10	1	18	1
Moving and standing vehicle, mobile equipment—side of road	5	–	10	–
Vehicle struck stationary object or equipment in roadway	3	–	6	–
Vehicle struck stationary object or equipment on side of road	46	4	95	3
Noncollision	48	4	106	4
Jackknifed or overturned—no collision	36	3	79	3
Ran off highway—no collision	9	1	19	1
Nonhighway (farm, industrial premises)	3	–	6	–
Aircraft	248	22	805	27
Worker struck by vehicle, mobile equipment	27	2	50	2
Worker struck by vehicle, mobile equipment in roadway	10	1	16	1
Worker struck by vehicle, mobile equipment on side of road	14	1	22	1
Worker struck by vehicle, mobile equipment in parking lot or nonroad area	6	1	12	–
Water vehicle	60	5	161	5
Collision	5	–	13	–
Explosion, fire, n.e.c.	4	–	13	–
Fall from or on ship or boat	4	–	7	–
Sinking, capsized water vehicle	43	4	119	4
Railway	24	2	54	2
Collision between railway vehicles	10	1	21	1
Collision between railway vehicle and other vehicle	13	1	29	1
Assaults and violent acts	208	19	611	21
Homicides	207	19	575	19
Hitting, kicking, beating	6	1	11	–
Shooting	190	17	409	14
Stabbing	11	1	19	1
Assaults and violent acts by person(s), n.e.c.	6	1	136	5
Suicide, self-inflicted injury	34	3	34	1
Contact with objects and equipment	55	5	113	4
Struck by object	16	1	30	1
Struck by falling object	11	1	20	1
Caught in or crushed in collapsing materials	37	3	78	3
Excavation or trenching cave-in	10	1	21	1
Other cave-in or landslide	9	1	18	1
Caught in or crushed in collapsing structure	13	1	29	1
Falls	25	2	53	2
Fall to lower level	25	2	53	2
Fall from scaffold, staging	7	1	14	–
Fall from building girders or other structural steel	9	1	21	1
Fall to lower level, n.e.c.	6	1	11	–
Exposure to harmful substances or environments	91	8	198	7
Contact with electric current	39	4	81	3
Contact with overhead power lines	33	3	67	2
Struck by lightning	3	–	6	–
Contact with temperature extremes	6	1	15	1
Contact with hot objects or substances	5	–	11	–
Exposure to caustic, noxious, or allergenic substances	29	3	61	2
Inhalation of substance	28	3	59	2
Inhalation in enclosed, restricted, or confined space[1]	21	2	43	1
Inhalation in open or nonconfined space	6	1	14	–
Oxygen deficiency	17	2	40	1
Drowning, submersion	13	1	31	1

See footnotes at end of table.

Table 2. Continued—Multiple-fatality occupational injuries by event or exposure, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Depletion of oxygen in other enclosed, restricted, or confined space[1]	3	–	7	–
Fires and explosions	93	8	265	9
Fires—unintended or uncontrolled	53	5	155	5
Fire in residence, building, or other structure	38	3	110	4
Forest, brush, or other outdoor fire	5	–	15	1
Explosion	41	4	110	4
Explosion, unspecified	2	–	6	–
Explosion of pressure vessel or piping	12	1	33	1

[1] Includes fatalities which occurred in structures that do not meet the definition of permit-required confined spaces as defined by Occupational Safety and Health Administration regulations.

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate less than or equal to 0.5 percent; n.e.c. = not elsewhere classified.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries.

for about one-fifth of multiple-fatality incidents and fatalities, slightly more than for fatalities overall. The category includes 173 multiple-homicide incidents claiming 535 workers' lives, plus 34 murder-suicides claiming an additional 40 workers' lives beyond the assailants who committed suicide in these incidents. The association between the victim and the perpetrator or the circumstances associated with the crime could be determined in more than two-thirds of work-related multiple-fatality homicides. The following tabulation summarizes these associations or circumstances:

Association of perpetrator to victim or circumstance associated with crime	*Percent of multiple-fatality work-related homicides*
Total (number = 575)	100
Association determined	70
Robber	24
Igniter of bomb or explosion	20
Coworker	19
Spouse (present or former), relative, or acquaintance	4
Customer or client	3
Association not determined	30

Overall, coworkers make up under one-tenth of all work-related homicide perpetrators, but are a fifth of multiple-fatality homicide perpetrators; robbers are a third of work-related homicide perpetrators, but only a quarter of multiple-fatality homicide perpetrators.[8]

Fires and explosions. Fires and explosions account for less than one-tenth of multiple-fatality incidents and fatalities. These 93 incidents claimed the lives of 265 workers.

The "fires and explosions" category, perhaps better than any other event or exposure category, illustrates how multiple-fatality incidents are atypical of the fatal-injury experience as a whole. Fires and explosions account for only 3 percent of overall work fatalities, thereby ranking as the smallest major event or exposure category among the six for which the Bureau of Labor Statistics routinely reports fatality data.[9]

But as table 2 shows, the "fires and explosions" category ranks third in the percentage of multiple fatalities, with 9 percent. Three other categories—exposure to harmful substances or environments, contact with objects or equipment, and falls—have fewer fatalities. Most strikingly, however, as table 1 shows, the "fires and explosions" category ranks first among major event categories with regard to the percentage of overall worker fatalities attributable to multiple-fatality incidents.

Other events or exposures. Exposure to harmful substances or environments accounts for less than one-tenth of multiple-fatality incidents, but, because this category averages only two decedents per incident, it accounts for an even smaller share of the fatalities in multiple-fatality incidents.

Falls, which constitute one-eighth of overall fatalities, account for a negligible share of multiple-fatality incidents and fatalities.

Factors underlying multiple-fatality incidents

The fatal event or exposure, such as the air crash, head-on highway collision, robbery-murder, explosion, or structural collapse, is the most consistent factor underlying the multiple-

fatality phenomenon. Except for murder-suicides, very rarely does the fatal event or exposure differ for the individual fatalities within a multiple-fatality incident.

In six-sevenths of multiple-fatality incidents, the workers involved work in the same or similar industries, while in two-thirds of multiple-fatality incidents, those involved work in the same or similar occupations. These ratios suggest that the industries in which workers are employed, more so than their particular occupations, are the more important factor in multiple-fatality incidents.

Industry and occupation. Most industries, especially in the private sector, are composed of workers in many different occupations.[10] Tables 3 and 4 illustrate, respectively, the number and percent distribution of multiple-fatality incidents and fatalities, by industry and occupation. Various kinds of jobs, as determined by industry and occupation, are particularly prone to multiple-fatality incidents.

Among civilian and military airplane pilots and navigators—an occupation with the third-highest overall fatality rate—there were 176 multiple-fatality incidents involving 271 fatalities. Half of all airplane pilot and navigator work fatalities took place in multiple-fatality incidents. Because pilots and passengers in some sort of work status often perish in the same incident, fewer than two pilots, on average, perish per multiple-fatality incident. Over the study period, public transportation attendants averaged more than 6 fatalities per multiple-fatality incident, due largely to a single air crash claiming more than two dozen flight attendants, a job falling into the occupational category of public transportation attendants. Of the 6 multiple-fatality incidents involving this occupation, 5 involved flight attendants, claiming 37 of them, plus 14 pilots and 26 workers in other occupations.

The air transportation industry accounts for 1 percent of overall fatalities and employment. But, as table 3 shows, it accounts for 8 percent of multiple-fatality incidents and 7 percent of fatalities in such incidents. Because nonscheduled air transportation, which usually involves smaller aircraft and crews, averages fewer than 2 fatalities per multiple-fatality incident, that industry accounts for seven-tenths of the multiple-fatality incidents in air transportation, but only half of the associated fatalities. In contrast, because scheduled air transportation averages 5 fatalities per incident, it accounts for almost as many fatalities in multiple-fatality incidents as does nonscheduled air transportation, yet with only a quarter as many multiple-fatality incidents as nonscheduled air transportation. Often, other fatalities in air transportation incidents are passengers who are present on the aircraft in connection with their jobs in other industries.[11]

Sometimes, air crashes can cause multiple-fatality incidents to account for a substantial segment of fatalities in industries unrelated to air transportation, but which might involve frequent travel. Air crashes predominate, for example, in research, development, and testing services, an industry in which multiple-fatality incidents account for nearly a third of the worker fatalities, and in engineering and architectural services, in which they account for more than a sixth. Of the 157 fatalities in these two components of engineering and management services, 15 multiple-fatality incidents account for 33 fatalities—19 of which occurred in multiple-fatality air crashes. Even in industries with low fatality counts, multiple-fatality air crashes can account for a high share of the industry's overall fatalities. For example, of the 39 fatalities in mailing, reproduction, and stenographic services, 11 multiple-fatality air crashes accounting for 15 fatalities made up two-fifths of the industry's fatalities.

In contrast, even though taxicab driver is an occupation with a very high fatality rate, due largely to homicides (typically during robberies),[12] multiple-fatality incidents are rare because taxicab drivers usually work alone. Of the 422 taxicab driver fatalities from 1995 to 1999, only 9 occurred in multiple-fatality incidents.

For the most part, multiple-fatality incidents distribute somewhat evenly among industries. In only a few industries, for various reasons, do they stand out as involving a substantially larger share of fatalities than the overall share.

For example, catastrophic fires and explosions may be particularly endemic to some industries. Fires and explosions account for four-fifths of fatalities in multiple-fatality incidents in the chemicals and allied products industry. Similarly, petroleum refining accounts for nearly all the fatalities from multiple-fatality incidents in the petroleum and coal products industry; three-quarters of those fatalities were due to fires. A quarter of the worker fatalities in chemicals and allied products, and a fifth of those in petroleum and coal products, are in multiple-fatality incidents. Of the 262 fatalities in these two industries, 69 are attributable to 27 multiple-fatality incidents. Of the 40 fatalities in explosives and fireworks manufacturing, 26 can be attributed to 8 multiple-fatality incidents, all from fires and explosions.[13]

Of the 164 fatalities in the motor vehicles and equipment and the aircraft and parts manufacturing industries, one-fifth are attributable to 13 multiple-fatality incidents accounting for 35 fatalities. Almost a quarter of worker fatalities in aircraft and parts manufacturing, and a third of those in motor vehicle and car body manufacturing, occurred in multiple-fatality incidents.

Multiple homicides were particularly prevalent in used-car dealerships during the study period. Of the 60 fatalities in this industry, one-fifth are attributable to 6 multiple-fatality incidents accounting for 12 fatalities—10 of which were homicides. By contrast, there were only 14 homicides among the remaining 48 single-fatality incidents.

Railroading is an industry in which a high proportion of workers is clustered into a few jobs specific to the industry.

Table 3. Multiple-fatality occupational injuries by industry, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Total	1,109	100	2,949	100
Private industry	938	85	2,290	78
Agriculture, forestry, and fishing	119	11	287	10
Agricultural production—crops	24	2	55	2
Fruits and tree nuts	7	1	25	1
Fruits and tree nuts, n.e.c.	1	–	13	–
General farms, primarily crop	8	1	16	1
Agricultural production—livestock	18	2	37	1
Livestock, except dairy and poultry	9	1	19	1
Beef cattle feedlots	3	–	6	–
Beef cattle, except feedlots	4	–	9	–
Dairy farms	3	–	6	–
Poultry and eggs	3	–	6	–
Agricultural services	30	3	57	2
Crop services	11	1	19	1
Crop planting and protecting	7	1	14	–
Animal services, except veterinary	3	–	5	–
Farm labor and management services	3	–	5	–
Landscape and horticultural services	12	1	24	1
Landscape counseling and planning	4	–	9	–
Lawn and garden services	4	–	8	–
Ornamental shrub and tree services	4	–	7	–
Fishing, hunting, and trapping	49	4	133	5
Commercial fishing	47	4	128	4
Finfish	17	2	47	2
Shellfish	22	2	63	2
Miscellaneous marine products	3	–	7	–
Hunting, trapping, game propagation	2	–	5	–
Mining	35	3	76	3
Metal mining	3	–	6	–
Coal mining	6	1	11	–
Bituminous coal and lignite mining	4	–	7	–
Oil and gas extraction	21	2	50	2
Oil and gas field services	19	2	46	2
Drilling oil and gas wells	5	–	11	–
Oil and gas field services, n.e.c.	13	1	31	1
Nonmetallic minerals, except fuels	5	–	9	–
Sand and gravel	3	–	5	–
Construction	166	15	339	11
General building contractors	24	2	45	2
Residential building construction	8	1	16	1
Single-family housing construction	5	–	10	–
Residential construction, n.e.c.	3	–	6	–
Nonresidential building construction	13	1	23	1
Nonresidential construction, n.e.c.	10	1	19	1
Heavy construction, except building	45	4	92	3
Highway and street construction	14	1	26	1
Heavy construction, except highway	31	3	66	2
Bridge, tunnel, and elevated highway	3	–	6	–
Water, sewer, and utility lines	13	1	26	1
Heavy construction, n.e.c.	15	1	34	1
Special trade contractors	97	9	200	7
Plumbing, heating, and air-conditioning	5	–	11	–
Painting and paper hanging	7	1	14	–
Electrical work	14	1	27	1
Masonry, stonework, tile setting, and plastering	11	1	22	1
Masonry and other stonework	7	1	14	–
Plastering, drywall, and insulation	4	–	8	–
Roofing, siding, and sheet metal work	11	1	21	1
Concrete work	5	–	10	–
Miscellaneous special trade contractors	42	4	87	3
Structural steel erection	8	1	17	1
Excavation work	5	–	8	–
Wrecking and demolition work	5	–	10	–
Special trade contractors, n.e.c.	21	2	46	2

See footnotes at end of table.

Table 3. Continued—Multiple-fatality occupational injuries by industry, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Manufacturing	133	12	290	10
Food and kindred products	12	1	20	1
Meat products	4	–	6	–
Apparel and other textile products	5	–	9	–
Lumber and wood products	11	1	18	1
Logging	4	–	7	–
Sawmills and planing mills	4	–	–	–
Sawmills and planing mills, general	3	–	6	–
Furniture and fixtures	5	–	8	–
Household furniture	5	–	8	–
Printing and publishing	5	–	8	–
Chemicals and allied products	20	2	54	2
Industrial inorganic chemicals	3	–	6	–
Drugs	2	–	7	–
Medicinals and botanicals	2	–	7	–
Industrial organic chemicals	3	–	8	–
Miscellaneous chemical products	8	1	26	1
Explosives	4	–	8	–
Chemicals and chemical preparations, n.e.c.	4	–	18	1
Petroleum and coal products	7	1	15	1
Petroleum refining	6	1	14	–
Rubber and miscellaneous plastics products	4	–	8	–
Miscellaneous plastics products, n.e.c.	4	–	8	–
Stone, clay, glass and concrete products	6	1	12	–
Concrete, gypsum, and plaster products	4	–	8	–
Ready-mixed concrete	3	–	6	–
Primary metal industries	13	1	31	1
Blast furnace and basic steel products	6	1	17	1
Blast furnaces and steel mills	4	–	12	–
Iron and steel foundries	4	–	10	–
Gray and ductile iron foundries	2	–	6	–
Fabricated metal products	8	1	17	1
Miscellaneous fabricated metal products	3	–	7	–
Industrial machinery and equipment	10	1	21	1
Construction and related machinery	3	–	7	–
Electronic and other electronic equipment	3	–	6	–
Transportation equipment	19	2	49	2
Motor vehicles and equipment	8	1	24	1
Motor vehicles and car bodies	5	–	13	–
Motor vehicle parts and accessories	2	–	5	–
Aircraft and parts	5	–	11	–
Ship and boat building and repairing	3	–	8	–
Transportation and public utilities	252	23	528	18
Railroad transportation	16	1	31	1
Railroads	16	1	31	1
Local and interurban passenger transportation	11	1	15	1
Local and suburban transportation	8	1	11	–
Trucking and warehousing	100	9	182	6
Trucking and courier services, except air	96	9	174	6
Local trucking, without storage	16	1	23	1
Trucking, except local	73	7	132	4
Public warehousing and storage	3	–	6	–
Water transportation	14	1	36	1
Deep sea foreign transportation of freight	4	–	11	–
Water transportation of passengers	1	–	5	–
Deep sea transportation of passengers, except by ferry	1	–	5	–
Water transportation services	8	1	18	1
Towing and tugboat services	4	–	10	–
Transportation by air	91	8	199	7
Air transportation, scheduled, and air courier services	18	2	84	3
Air transportation, scheduled	16	1	81	3
Air transportation, nonscheduled	65	6	99	3
Airports, flying fields, and services	10	1	16	1
Transportation services	5	–	12	–
Passenger transportation arrangement	2	–	5	–

See footnotes at end of table.

Table 3. Continued—Multiple-fatality occupational injuries by industry, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Freight transportation arrangement	2	–	5	–
Communications	8	1	11	–
Electric, gas, and sanitary services	21	2	42	1
Electric services	8	1	18	1
Combination utility services	3	–	7	–
Electric and other services combined	2	–	5	–
Sanitary services	6	1	11	–
Refuse systems	6	1	11	–
Wholesale trade	42	4	79	3
Wholesale trade—durable goods	25	2	49	2
Motor vehicles, parts, and supplies	4	–	5	–
Professional and commercial equipment	2	–	8	–
Hardware, plumbing and heating equipment	4	–	10	–
Machinery, equipment, and supplies	8	1	11	–
Miscellaneous durable goods	4	–	9	–
Scrap and waste materials	3	–	5	–
Wholesale trade—nondurable goods	17	2	30	1
Groceries and related products	8	1	16	1
Farm-product raw materials	2	–	5	–
Retail trade	128	12	261	9
General merchandise stores	7	1	11	–
Department stores	4	–	6	–
Food stores	28	3	54	2
Grocery stores	24	2	46	2
Automotive dealers and service stations	17	2	31	1
New- and used-car dealers	3	–	5	–
Used-car dealers	6	1	12	–
Apparel and accessory stores	4	–	13	–
Family clothing stores	2	–	9	–
Furniture and homefurnishings stores	5	–	12	–
Furniture and homefurnishings stores	3	–	8	–
Eating and drinking places	41	4	82	3
Eating places	31	3	61	2
Drinking places	5	–	9	–
Miscellaneous retail	27	2	56	2
Liquor stores	4	–	9	–
Miscellaneous shopping goods stores	7	1	15	1
Sporting goods and bicycle shops	3	–	7	–
Nonstore retailers	7	1	17	1
Direct selling establishments	4	–	12	–
Fuel dealers	3	–	6	–
Retail stores, n.e.c.	4	–	5	–
Finance, insurance, and real estate	29	3	77	3
Depository institutions	8	1	30	1
Savings institutions	3	–	6	–
Credit unions	2	–	19	1
Insurance carriers	3	–	6	–
Insurance agents, brokers, and service	4	–	9	–
Real estate	9	1	18	1
Real estate operators and lessors	5	–	11	–
Nonresidential building operators	3	–	5	–
Real estate agents and managers	3	–	6	–
Holdings and other investment offices	2	–	7	–
Miscellaneous investing	1	–	6	–
Services	170	15	335	11
Hotels and other lodging places	3	–	7	–
Hotels and motels	3	–	7	–
Personal services	5	–	8	–
Business services	51	5	83	3
Mailing, reproduction, stenographic	11	1	15	1
Miscellaneous equipment rental and leasing	5	–	7	–
Personnel supply services	11	1	20	1
Help supply services	11	1	20	1
Computer and data processing services	5	–	5	–

See footnotes at end of table.

Table 3. Continued—Multiple-fatality occupational injuries by industry, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Miscellaneous business services	15	1	28	1
Detective and armored car services	7	1	15	1
Automotive repair, services, and parking	11	1	20	1
Automotive repair shops	8	1	13	–
Top, body, and upholstery repair shops and paint shops	3	–	5	–
General automotive repair shops	3	–	6	–
Miscellaneous repair services	4	–	9	–
Miscellaneous repair shops	4	–	9	–
Motion pictures	3	–	7	–
Amusement and recreation services	19	2	40	1
Producers, orchestras, entertainers	5	–	9	–
Miscellaneous amusement, recreation services	14	1	31	1
Health services	20	2	39	1
Nursing and personal care facilities	3	–	5	–
Hospitals	8	1	17	1
General medical and surgical hospitals	7	1	13	–
Legal services	13	1	21	1
Educational services	15	1	24	1
Colleges and universities	2	–	5	–
Schools and educational services, n.e.c.	9	1	13	–
Social services	3	–	7	–
Child day care services	2	–	5	–
Membership organizations	12	1	24	1
Religious organizations	9	1	18	1
Engineering and management services	20	2	39	1
Engineering and architectural services	9	1	18	1
Engineering services	3	–	6	–
Architectural services	3	–	5	–
Surveying services	3	–	7	–
Research and testing services	6	1	15	1
Government[1]	214	19	659	22
Federal Government (including resident Armed Forces)	84	8	378	13
Transportation and public utilities	3	–	7	–
Public administration	79	7	368	12
Executive, legislative, and general government	2	–	97	3
Justice, public order, and safety	4	–	7	–
Public order and safety	4	–	7	–
Police protection	4	–	7	–
Environmental quality and housing and administration of economic programs	11	1	28	1
National security and international affairs	60	5	232	8
National security	60	5	232	8
State government	54	5	106	4
Construction	6	1	10	–
Heavy construction, except building	6	1	10	–
Highway and street construction	6	1	10	–
Services	13	1	26	1
Educational services	8	1	15	1
Colleges and universities	8	1	15	1
Social services	3	–	7	–
Public administration	33	3	66	2
Justice, public order, and safety	16	1	30	1
Public order and safety	16	1	30	1
Police protection	13	1	23	1
Finance, taxation, and monetary policy	1	–	5	–
Administration of human resources	2	–	5	–
Environmental quality and housing and administration of economic programs	11	1	20	1

See footnotes at end of table.

Table 3. Continued—Multiple-fatality occupational injuries by industry, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Local government	81	7	170	6
Construction	3	–	5	–
Heavy construction, except building	3	–	5	–
Transportation and public utilities	4	–	8	–
Electric, gas, and sanitary services	4	–	8	–
Services	13	1	22	1
Educational services	7	1	13	–
Elementary and secondary schools	5	–	10	–
Public administration	64	6	135	5
Executive, legislative, and general government	8	1	17	1
Executive and legislative combined	3	–	8	–
Justice, public order, and safety	53	5	113	4
Public order and safety	53	5	113	4
Police protection	22	2	37	1
Fire protection	31	3	73	2
Environmental quality and housing and administration of economic programs	3	–	5	–

[1] Includes fatalities to workers employed by governmental organizations regardless of industry.

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate less than or equal to 0.5 percent; n.e.c. = not elsewhere classified.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries

The 35 fatalities in 18 multiple-fatality incidents, accounting for one-fifth of railroading's overall fatalities, are composed almost entirely of workers in a few rail transportation occupations, such as locomotive operator or train conductor.[14] Accordingly, the 15 multiple-fatality incidents involving rail transportation occupations account for 27 of the 113 fatalities in this group of occupations. Almost all were transportation incidents, such as collisions between rail vehicles or derailments.

Fishers and loggers typically have maintained the highest overall fatality rates, exchanging places as the most deadly job from year to year. Yet, their multiple-fatality experiences are radically different. A multiple-fatality incident is rare among timber-cutting and logging occupations.[15] The 584 timber-cutting and logging fatalities include only 5 multiple-fatality incidents with 8 associated fatalities. Fishers, including fishing vessel captains and officers, by contrast, make up 1 percent of overall fatalities, but 4 percent of fatalities in multiple-fatality incidents. Fishing's 44 multiple-fatality incidents account for 122 of the 339 fisher fatalities during the 5-year study period. Almost all of the fishing fatalities are the result of water-vessel incidents, mostly vessel casualties.

Similarly, among water transportation occupations, the 13 multiple-fatality incidents accounting for 32 fatalities make up one-sixth of fatalities in this occupation group, which includes ship captains, mates, sailors, deckhands, and marine engineers, except on fishing boats. As with fishing, most of these deaths involve vessel casualties. Likewise, of the water transportation industry's 189 fatalities, 36 occurred in 14 multiple-fatality incidents.

Firefighting occupations account for 31 multiple-fatality incidents involving 72 fatalities. Fires and explosions claimed the lives of 52 of the 72 firefighters who died in multiple-fatality incidents, with most of the rest of these fatalities occurring in transportation incidents.

Although managerial and professional specialty occupations have a very low fatality risk overall, one-sixth of fatally injured workers in these occupations die in multiple-fatality incidents. This phenomenon appears to be widely spread through the various managerial and professional specialty categories, driven by the disproportionately high incidence of transportation fatalities and homicides and suicides among these workers. While managerial and professional specialty occupations account for one-ninth of overall occupational fatalities, they make up one-fifth of multiple-fatality transportation incidents and one-third of multiple-fatality homicides and suicides. For example, the legal profession, with a fatality rate a mere fraction of the overall rate, is very safe. Nevertheless, 14 multiple-fatality incidents involving 20 fatalities account for more than a quarter of the 74 work-related fatal injuries to lawyers, mainly air crashes in which workers in other occupations also died.

Table 4. Multiple-fatality occupational injuries by occupation, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Total	1,109	100	2,949	100
Civilian occupations	1,058	95	2,726	92
Managerial and professional specialty occupations	266	24	531	18
Executive, administrative, and managerial occupations	183	17	327	11
Administrators and officials, public administration	7	1	28	1
Financial managers	11	1	12	–
Managers, marketing, advertising, and public relations	10	1	12	–
Administrators, education and related fields	5	–	6	–
Managers, food serving and lodging establishments	32	3	36	1
Managers, properties and real estate	7	1	13	–
Managers and administrators, n.e.c.	101	9	151	5
Management-related occupations	32	3	59	2
Accountants and auditors	12	1	18	1
Other management-related occupations	22	2	41	1
Professional specialty occupations	112	10	204	7
Engineers, architects, and surveyors	24	2	46	2
Architects	4	–	6	–
Engineers	20	2	40	1
Electrical and electronic engineers	8	1	10	–
Engineers, n.e.c.	5	–	12	–
Mathematical and computer scientists8	1	9	–	
Computer systems analysts and scientists	7	1	8	–
Natural scientists	10	1	13	–
Biological and life scientists	4	–	5	–
Health diagnosing occupations	5	–	6	–
Health assessment and treating occupations	17	2	28	1
Registered nurses	11	1	14	–
Therapists	4	–	6	–
Physician's assistants	2	–	7	–
Teachers, postsecondary	5	–	8	–
Teachers, except postsecondary	13	1	15	1
Teachers, n.e.c.	10	1	11	–
Social, recreation, and religious workers	11	1	21	1
Social workers	4	–	8	–
Clergy and religious workers	7	1	13	–
Lawyers	14	1	20	1
Writers, artists, entertainers, and athletes	25	2	34	1
Photographers	11	1	13	–
Designers, musicians, composers, actors, and other artists, performers, and related workers	9	1	13	–
Athletes	2	–	5	–
Technical, sales, and administrative support	290	26	536	18
Technicians and related support occupations	173	16	273	9
Health technologists and technicians	12	1	14	–
Health technologists and technicians, n.e.c.	11	1	13	–
Engineering and related technologists and technicians	11	1	14	–
Electrical and electronic technicians	5	–	6	–
Surveying and mapping technicians	3	–	5	–
Science technicians	5	–	9	–
Technicians, except health, engineering, and science	159	14	236	8
Airplane pilots and navigators	146	13	215	7
Technicians, n.e.c.	11	1	13	–
Sales occupations	102	9	177	6
Supervisors and proprietors, sales occupations	53	5	74	3
Sales representatives, finance and business services	9	1	19	1
Securities and financial services sales occupations	1	–	9	–
Sales representatives, commodities except retail	13	1	15	1
Sales representatives, mining, manufacturing, and wholesale	13	1	15	1
Sales workers, retail and personal services	43	4	68	2

See footnotes at end of table.

Table 4. Continued—Multiple-fatality occupational injuries by occupation, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Sales workers, other commodities	14	1	19	1
Sales counter clerks	3	–	5	–
Cashiers	18	2	25	1
Street and door-to-door sales workers	2	–	9	–
Administrative support occupations, including clerical	35	3	86	3
Supervisors, administrative support occupations	3	–	7	–
Secretaries, stenographers, and typists	5	–	11	–
Information clerks	7	1	13	–
Records processing occupations, except financial	4	–	10	–
Mail and message distributing occupations	4	–	7	–
Material recording, scheduling, and distributing clerks	6	1	10	–
Stock and inventory clerks	3	–	6	–
Miscellaneous administrative support	6	1	19	1
General office clerks	2	–	8	–
Administrative support occupations, n.e.c.	4	–	5	–
Service occupations	141	13	309	10
Protective service occupations	81	7	176	6
Firefighting and fire prevention occupations, including administrators and supervisors	31	3	72	2
Administrators and supervisors, firefighting and fire prevention occupations	6	1	10	–
Firefighting occupations	30	3	62	2
Police and detectives, including supervisors	38	3	82	3
Supervisors, police, detectives, and correctional institution officers	6	1	6	–
Police and detectives, public service	27	2	55	2
Sheriffs, bailiffs, and other law enforcement officers	9	1	15	1
Correctional institution officers	2	–	6	–
Guards, including supervisors	14	1	22	1
Guards and police, except public service	11	1	18	1
Service occupations, except protective and household	61	6	133	5
Food preparation and service occupations	27	2	40	1
Waiters and waitresses	4	–	5	–
Cooks	13	1	16	1
Miscellaneous food preparation occupations	4	–	6	–
Health service occupations	4	–	7	–
Nursing aides, orderlies, and attendants	4	–	7	–
Cleaning and building service occupations, except household	20	2	30	1
Janitors and cleaners	16	1	24	1
Personal service occupations	14	1	56	2
Guides	5	–	10	–
Public transportation attendants	6	1	39	1
Farming, forestry, and fishing	115	10	269	9
Farming operators and managers	23	2	33	1
Farmers, except horticultural	14	1	21	1
Managers, farms, except horticultural	9	1	12	–
Other agricultural and related occupations	52	5	101	3
Farm occupations, except managerial	39	4	74	3
Supervisors, farmworkers	5	–	5	–
Farmworkers	37	3	69	2
Related agricultural occupations	14	1	27	1
Groundskeepers and gardeners, except farm	8	1	18	1
Animal caretakers, except farm	4	–	5	–
Forestry and logging occupations	7	1	11	–
Timber cutting and logging occupations	5	–	8	–
Fishers, hunters, and trappers	45	4	124	4
Fishers, including vessel captains and officers	44	4	122	4
Precision production, craft, and repair	212	19	361	12
Mechanics and repairers	66	6	98	3
Supervisors, mechanics and repairers	9	1	12	–
Mechanics and repairers, except supervisors	61	6	86	3
Vehicle and mobile equipment mechanics, repairers	31	3	42	1
Automobile mechanics	6	1	10	–
Bus, truck, and stationary engine mechanics	3	–	5	–

See footnotes at end of table.

Table 4. Continued—Multiple-fatality occupational injuries by occupation, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Aircraft engine mechanics	10	1	11	–
Heavy equipment mechanics	9	1	13	–
Electrical and electronic equipment repairers	8	1	12	–
Electronic repairers, communications and industrial equipment	7	1	11	–
Miscellaneous mechanics and repairers		17	2	25 1
Office machine repairers	1	–	6	–
Specified mechanics and repairers, n.e.c.	6	1	9	–
Not-specified mechanics and repairers	6	1	6	–
Construction trades	107	10	184	6
Brickmasons, stonemasons, tile setters, including supervisors	3	–	5	–
Carpet installers, carpenters, drywall installers, including supervisors	13	1	20	1
Electricians and electrical power installers and repairers, including supervisors	24	2	42	1
Painters, paperhangers, and plasterers, including supervisors	8	1	15	
Plumbers, pipefitters, steamfitters, including supervisors	13	1	20	1
Supervisors, n.e.c.	16	1	17	1
Concrete and terrazzo finishers	3	–	5	–
Roofers	5	–	8	–
Structural metal workers	9	1	18	1
Construction trades, n.e.c.	14	1	25	1
Extractive occupations	24	2	33	1
Drillers, oil wells	7	1	8	–
Mining machine operators	6	1	9	–
Mining occupations, n.e.c.	9	1	11	–
Precision production occupations	36	3	46	2
Supervisors, production occupations	19	2	23	1
Precision metalworking occupations	11	1	13	–
Machinists	5	–	6	–
Plant and system operators	7	1	8	–
Operators, fabricators, and laborers	370	33	697	24
Machine operators, assemblers, and inspectors	66	6	114	4
Machine operators and tenders, except precision	39	4	66	2
Metalworking and plasticworking machine operators	3	–	6	–
Machine operators, assorted materials	32	3	51	2
Furnace, kiln, and oven operators, except food	5	–	9	–
Miscellaneous machine operators, n.e.c.	8	1	12	–
Machine operators, not specified		12	1	16 1
Fabricators, assemblers, and handworking occupations	30	3	44	1
Welders and cutters	23	2	34	1
Assemblers	7	1	10	–
Transportation and material moving occupations	204	18	368	12
Motor vehicle operators	155	14	267	9
Truckdrivers	137	12	242	8
Driver-sales workers	8	1	8	–
Busdrivers	4	–	5	–
Taxicab drivers and chauffeurs	6	1	9	–
Transportation occupations, except motor vehicles	28	3	59	2
Rail transportation occupations	15	1	27	1
Railroad conductors and yardmasters	8	1	10	–
Locomotive operating occupations		10	1	15 1
Water transportation occupations	13	1	32	1
Ship captains, mates, sailors, and deckhands, except fishing boats	12	1	29	1
Material moving equipment operators	29	3	42	1
Operating engineers	11	1	14	–
Hoist and winch operators	4	–	9	–
Industrial truck and tractor equipment operators	4	–	5	–
Miscellaneous material moving equipment operators	4	–	6	–
Handlers, equipment cleaners, helpers, and laborers	138	12	215	7
Construction laborers	68	6	111	4
Freight, stock, and material handlers	17	2	21	1
Stock handlers and baggers	8	1	9	–
Freight, stock, and material handlers, n.e.c.	7	1	10	–

See footnotes at end of table.

Table 4. Continued—Multiple-fatality occupational injuries by occupation, 1995–99

Characteristics	Multiple-fatality incidents		Fatalities	
	Number	Percent	Number	Percent
Vehicle washers and equipment cleaners	3	–	5	–
Laborers, except construction	42	4	66	2
Nonclassifiable occupations	20	2	23	1
Military occupations	56	5	223	8
Technical, sales, and administrative support	31	3	57	2
Technicians and related support occupations	31	3	57	2
Technicians, except health, engineering, and science	31	3	56	2
Airplane pilots and navigators	31	3	56	2
Precision production, craft, and repair	5	–	8	–
Mechanics and repairers	5	–	8	–
Mechanics and repairers, except supervisors	5	–	7	–
Vehicle and mobile equipment mechanics, repairers	5	–	7	–
Aircraft engine mechanics	5	–	6	–
Military occupations (Armed Forces), n.e.c.	39	4	152	5

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate less than or equal to 0.5 percent; n.e.c. = not elsewhere classified.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries.

In the same vein, multiple fatality incidents account for one-third of work fatalities involving photographers; these 11 multiple-fatality incidents produced 13 fatalities—all air crashes, typically involving aerial photography, in which 9 pilots and 4 workers in other occupations also perished. Exhibit 1 lists selected occupations with high proportions of multiple-fatality cases and notable characteristics, if any, associated with these occupations.

Multiple-fatality incidents generally do not play prominent roles in factory-type production jobs. An exception is furnace, kiln, and oven operators, except food: of the 31 fatalities involving this occupation, 9 resulted from 5 multiple-fatality incidents in which 4 workers in other occupations also perished. Not surprisingly, these incidents involved primarily fires and explosions. Similarly, of 58 fatally injured assemblers, 10 died in 7 multiple-fatality incidents in which 11 workers in other occupations also perished.

Some occupations that might be expected to have high incidences of multiple fatalities in fact do not. The construction trades, for example, account for one-tenth of overall fatalities, but a much smaller proportion of fatalities in multiple-fatality incidents. Despite images of mine-tunnel collapses and mine explosions, only 9 mining machine operators and 11 miscellaneous mining workers perished in multiple-fatality incidents out of the 215 fatalities suffered by workers in these two occupations during the 5-year study period. Even though extractive occupations have high fatality rates, they merely mirror multiple-fatality aggregate trends, as does mining as an industry. Mine-tunnel collapses are often thought of as multiple-fatality catastrophes, but only a quarter of fatalities among mine workers in such collapses occurred in multiple-fatality incidents. Similarly, although truckdrivers have high fatality rates and experience more job fatalities than any other occupation, only 6 percent of those fatalities occurred in multiple-fatality incidents.

Government. As the following tabulation shows, all levels of government claim a larger share of multiple-fatality incidents and associated fatalities than does the private sector:[16]

	Overall fatalities, percent	*Multiple-fatality incidents*		*Associated fatalities*	
		Number	*Percent*	*Number*	*Percent*
Private industry	90	938	85	2,290	78
Government	10	214	19	659	22
Federal	3	84	8	378	13
State	2	54	5	106	4
Local	5	81	7	170	6

Note that government accounts for 10 percent of overall fatalities, but twice that share of multiple-fatality incidents and associated fatalities.

1. Federal Government. As table 3 illustrates, national security accounts for more than two-thirds of the multiple-fatality incidents in the Federal Government and three-fifths of the

Exhibit 1. Selected occupations with high proportions of worker fatalities taking place in multiple-fatality incidents, 1995–99

Three-tenths or more of overall worker fatalities in the following occupations took place in multiple-fatality incidents:

Occupation	Notable characteristics
Hunting and other kinds of guides	All transportation incidents
Photographers	All air crashes, typically involving aerial photography
Accountants and auditors	None
Information clerks	None

One-quarter of overall worker fatalities in the following occupations took place in multiple-fatality incidents:

Occupation	Notable characteristics
Lawyers	Mainly air crashes
Financial managers	Two-thirds were homicides
Miscellaneous administrative support occupations	None
Administrators in education and related fields	None
Science technicians	None
Miscellaneous technicians[1]	None
Engineers and architects	Mostly air crashes

A share substantially larger than the overall share of worker fatalities in the following occupations took place in multiple-fatality incidents:

Occupation	Notable characteristics
Health assessment and treating occupations	None
Mathematical, computer, and natural scientists	None
Clergy and religious workers	None
Secretaries, stenographers, and typists	None
Registered nurses	All were air crashes, most involving helicopter ambulances or rescue efforts
University and other postsecondary teachers	None
Artists, except photographers	None

[1] Includes air traffic controllers, broadcast equipment operators, computer programmers, numerical control tool programmers, paralegals and other legal assistants, and miscellaneous technicians other than health, engineering, and science technicians.

associated fatalities. The Federal Government averaged more than four fatalities per multiple-fatality incident and accounted for the most fatalities associated with multiple-fatality incidents of any level of government, even though it has the lowest employment of all three levels.

Multiple-fatality incidents are common in the military. The 56 multiple-fatality incidents involving military personnel account for 223 fatalities, constituting 5 percent of multiple-fatality incidents and 8 percent of associated fatalities. Military occupations account for just under 1 percent of employment and just under 2 percent of overall work fatalities.[17]

As the following tabulation shows, vehicles are associated with virtually all of the military fatalities, with aircraft accounting for virtually all of the vehicles:

Kind of vehicle	*Number of fatalities*
Total	223
Vehicles	210
Aircraft	194
Fixed wing	68
Rotary wing	117
Motor vehicles	16

Rotary-wing aircraft, primarily helicopters, account for nearly twice as many military fatalities in multiple-fatality incidents as do fixed-wing aircraft. Because seven-eighths of military fatalities involve aircraft, military multiple-fatality incidents average 4 decedents per incident.

2. State government. Multiple-fatality incidents and associated fatalities are more widely dispersed in State government than they are in the Federal Government. Police protection accounts for the most fatalities from multiple-fatality incidents. These 23 State police fatalities arising from 13 multiple-fatality incidents represent more than one-fifth of overall State police protection fatalities.

3. Local government. Fire protection accounts for the largest number of multiple-fatality incidents and fatalities in local government, with more than one-third of multiple-fatality incidents and two-fifths of associated fatalities. Police protection accounts for the second-largest number. Although there are more multiple-fatality local police protection incidents and fatalities than in State government, the 37 local police protection fatalities arising from 22 multiple-fatality incidents account for less than one-tenth of local police protection fatalities. It is not clear why so much larger a proportion of State police protection fatalities occurs in multiple-fatality incidents compared with the proportion of local police protection fatalities; the underlying characteristics of multiple-fatality incidents for both categories of worker is a similar mix of homicides and auto and air crashes.

Another surprising finding is the prevalence of multiple-fatality incidents in the public administration of environmental quality, housing, and economic programs. After all levels of government are aggregated, data show that there were 53 fatalities arising from 24 multiple-fatality incidents. These 53 fatalities account for almost one-fifth of this category's fatalities. Air crashes account for almost half of these fatalities, homicides for almost a quarter.

THIS ARTICLE REPRESENTS THE FIRST TIME that the Bureau of Labor Statistics has examined multiple-fatality incidents. A few general conclusions can be reached. First, multiple-fatality incidents occur in varying degrees in almost all event or exposure categories, but in some they make up larger or smaller shares of the category's overall fatalities. Second, except in the case of murder-suicides, very rarely does the fatal event or exposure differ among the individual victims of the same multiple-fatality incident. Third, most multiple-fatality incidents involve workers in the same or similar industries and occupations. Finally, multiple-fatality incidents are a unique phenomenon: in most major respects, the fatal events or exposures underlying the circumstances under which they occur and the kinds of jobs in which they are most prevalent often do not reflect the fatal injury experience as a whole. □

Notes

[1] The Census of Fatal Occupational Injuries (CFOI) program, which has collected occupational fatality data nationwide since 1992, uses diverse data sources to identify, verify, and profile fatal work injuries. Information about each workplace fatality (occupation and other worker characteristics, circumstances of the event, and other cases arising out of the same incident) is obtained by cross-referencing source documents, such as death certificates, workers' compensation records, media accounts, and reports to Federal and State agencies. This approach ensures that counts are as complete and accurate as possible. CFOI data do not include data on fatal work illnesses. For purposes of this article, CFOI data for 1995–99 were used.

[2] For example, in 1995, both the number of fatalities in the "10 or more fatalities per incident" category and the number of fatalities in the Federal Government were significantly greater than the average, due to the bombing of a Federal building that resulted in more than a hundred work-related fatalities.

[3] The event or exposure describes the manner in which the injury was produced or inflicted. For further explanation, see Guy Toscano, Janice Windau, and Dino Drudi, "Using the BLS Occupational Injury and Illness Classification System as a Safety and Health Management Tool," *Compensation and Working Conditions*, June 1996, pp. 19–28.

[4] Even though virtually every kind of fatal event can involve multiple fatalities, the event or exposure categories in which multiple-fatality incidents are rare include sudden stop or start noncollision highway incidents; some nonhighway and railway vehicle incident categories; assaults by animals; being struck by a flying, swinging, or slipping object; being compressed or pinched by rolling, sliding, or shifting objects; falling down stairs or steps; falling from the floor, dock, or ground level; falling from a roof; falling from a nonmoving vehicle; falling from piled or stacked materials; jumping to a lower level; falling on the same level; coming into contact with the electric current of a machine, a tool, an appliance, a light fixture, wiring, a transformer, or some other electrical component; ingestion of a substance; needle sticks; venomous bites; and ignition of one's clothing from a controlled heat source. Multiple fatalities are underrepresented, although less so, among, for example, suicides; workers caught in running equipment or machinery; and workers coming into contact with electric currents other than in overhead power lines. Falls from scaffolds, too, rarely claim more than one worker's life. Even excavation or trenching cave-ins show no greater propensity to result in multiple-fatality incidents than events or exposures overall: during the 5-year study period, the 10 excavation or trenching cave-ins in which more than one worker was killed claimed 21 of the 213 workers involved in these kinds of fatalities.

[5] Another example illustrating this concept is as follows: suppose that, in 4 of 5 multiple-fatality head-on collisions involving truckdrivers, the truckdrivers of both vehicles were killed, but in the fifth only one truckdriver was killed, because the fatally injured driver of the other truck

was a carpenter driving between construction sites; then those five multiple-fatality incidents involved nine truckdrivers and one carpenter, so the average number of fatally injured truckdrivers is 1.8 (that is, 9 truckdrivers ÷ 5 incidents = 1.8 truckdrivers per incident).

[6] Figures for separate categories may not sum to totals because of incidents involving more than one transportation mode and categories that are not shown separately.

[7] Vessel casualties include sinkings, capsizings, and vessel explosions and fires.

[8] Eric F. Sygnatur and Guy A. Toscano, "Work-related Homicides: The Facts," *Compensation and Working Conditions*, spring 2000, p. 5. Also noteworthy is that better information seems to be available on multiple-fatality homicides, reducing the share for which a victim-perpetrator association or circumstance associated with crime is undetermined. Whether this is due to better documentation being available or to the particular mix of victim-perpetrator associations or circumstances associated with crime is unknown.

[9] The only smaller categories are bodily reaction and exertion (which includes overexertion and repetitive motion) and the category titled "nonclassifiable," each of which averaged under a dozen fatality cases per year.

[10] As used in this context, the term *industry* refers to industries listed in the *Standard Industrial Classification Manual* (Office of Management and Budget, 1987), and *occupation* refers to occupations listed in the *Census of Population Alphabetical Index of Occupations* (Bureau of the Census, 1990), as modified by the Bureau of Labor Statistics.

[11] For further information about air transportation occupational fatalities, see Peggy Suarez, "Flying Too High: Worker Fatalities in the Aeronautics Field," *Compensation and Working Conditions*, spring 2000, pp. 39–42.

[12] Andrew T. Knestaut, "Fatalities and Injuries Among Truck and Taxicab Drivers," *Compensation and Working Conditions*, fall 1997, pp. 55–60. This occupation also includes chauffeurs.

[13] Although the industry titled chemicals and chemical preparations, not elsewhere classified (see table 3), involves a disparate range of manufactures, such as lemon and eucalyptus oil, writing ink, soil-testing kits, napalm, and flares, the vast majority of the fatalities in that industry, including virtually all the multiple-fatality incidents, involved fireworks manufacturing.

[14] For purposes of the analysis in this paragraph, commuter railroads and subway and trolley transit operations within Standard Industrial Code 411, "Local and Suburban Transportation" have been combined with Standard Industrial Code 40, "Railroad Transportation."

[15] The timber-cutting and logging category also includes supervisors of forestry and logging workers.

[16] Figures for separate categories may not sum to totals because of incidents involving more than one sector and categories that are not shown separately.

[17] To be included in the fatality census, the incident leading to the death must have occurred within the territorial limits of one of the 50 States or the District of Columbia or within the 200-mile offshore economic zone. Incidents that occur in international airspace or waters may be included if a State, the District of Columbia, or the U.S. military issues a death certificate. Incidents occurring in a foreign country are excluded.

Appendix: Identifying work-related multiple fatalities

This appendix explains the mechanics of identifying and reporting work-related multiple-fatality data. Each work-related fatality data record that the Census of Fatal Occupational Injuries (CFOI) processes carries a multiple-fatality data field. This field is filled with blanks or zeros for single-fatality incidents. For multiple-fatality incidents, each jurisdiction participating in the CFOI assigns a natural number code to each fatality associated with each particular multiple-fatality incident in that jurisdiction during that year. This code must be unique within that jurisdiction for that year. As long as all work fatalities associated with an incident carry the same unique code, jurisdictions are generally free to choose their numbering system.

To illustrate, usually jurisdictions number their multiple-fatality incidents ordinally by date. For example, the three fatalities associated with the first multiple-fatality incident in a particular jurisdiction in a given year might be assigned the code "1"; the two associated with the next such incident might initially have been assigned the code "2," except that the jurisdiction later ascertained that one of the decedents was not in a work status and deleted the "2." By this time, however, an incident involving five decedents, four of whom later were confirmed as being in a work status, might already have been assigned the code "3." In that event, jurisdictions usually leave the "3" on the cases associated with this incident, even though there no longer would be any cases with the code "2."

For purposes of the analysis in this article, these codes were appended to the jurisdiction code and the year in order to create unique codes for each multiple-fatality incident. Nevertheless, because very little attention previously had been paid to the multiple-fatality phenomenon, a large number of errors had to be addressed. To identify these errors, cases were sorted by jurisdiction, date and time of incident, county of incident, age of decedent, and event or exposure category. For example, for those cases with a multiple-fatality code that had no corresponding associated fatality, either they had to be deleted (cases called "orphans") or matching codes had to be assigned to the associated fatality or fatalities that were missing them (cases called "widows"). Sometimes, blocks of cases had to be disentangled because jurisdictions had assigned the same code to cases from different multiple-fatality incidents.

Employment in the public sector: two recessions' impact on jobs

Government employment surged during the 2001 recession, only to fall victim to prolonged budget shortfalls afterwards; compared with the 1990s recession and aftermath, the 2001 recession itself had less of an effect on government employment, but the postrecessionary period was more difficult

Julie Hatch

Since 1939, the public sector has increased its share of nonfarm employment by 3 percentage points.[1] Overall, 1 out of every 6 jobs in the nonfarm economy is now in government. The 2001 recession affected Federal, State, and local governments in various ways. The largest sector, local government, was influenced the least, although a reduced rate of employment growth was evident in both 2003 and the first half of 2004. State government employment, the most cyclical in nature, peaked months before Federal Government, but well after total private employment. The Federal Government created a new agency in the aftermath of the terrorist attacks on September 11, 2001, while the U.S. Postal Service felt the brunt of the recession and continued experiencing financial difficulties. Growth in employment during and after the latest recession contrasts sharply with employment growth in the 1990–91 recession and subsequent recovery.

Total private payroll employment peaked in December 2000, but job growth in government boosted total nonfarm employment. The tide turned, however, when construction and information employment peaked in March 2001. Strength in government and in a handful of private service-providing industries (financial activities, health services, and leisure and hospitality) was not enough. Coinciding with the U.S. business cycle peak declared by the National Bureau of Economic Research, total nonfarm employment peaked in March 2001 and then declined until August 2003.[2]

The so-called jobless recovery of the 1990 recession became the period of comparison. The labor market continued to remain weak after the recession ended in March 1991, even as other parts of the economy gained momentum.[3] In fact, nonfarm employment remained relatively flat and did not recover until early 1993. Despite the "jobless" epithet, the labor market fared better following the 1990s recession than following the 2001 recession. (See chart 1.) Payrolls grew by 876,000 jobs 21 months after the end of the 1990s recession, compared with 1,082,000 jobs lost 21 months after the 2001 recession ended. Employment slowly started to recover in September 2003. Compared with employment in private industry, government employment fared better during the later recession, but faltered after it ended.

In order to get a better understanding of how the 2001 recession was different from the earlier one, this article examines employment in each component of government, along with total nonfarm employment, total private employment, and government employment as a whole. The latest recessionary period and recovery is compared with the 1990s recession and the subsequent recovery and expansion. Each level of government works with certain rules and agendas that can influence how a recession affects employment. The Federal Government does not work under a balanced-budget constraint, so it can incur deficits. Broad issues such as national security, infrastructure, international relations, and social welfare are the Federal Government's primary concern. State governments represent the agendas of the 50

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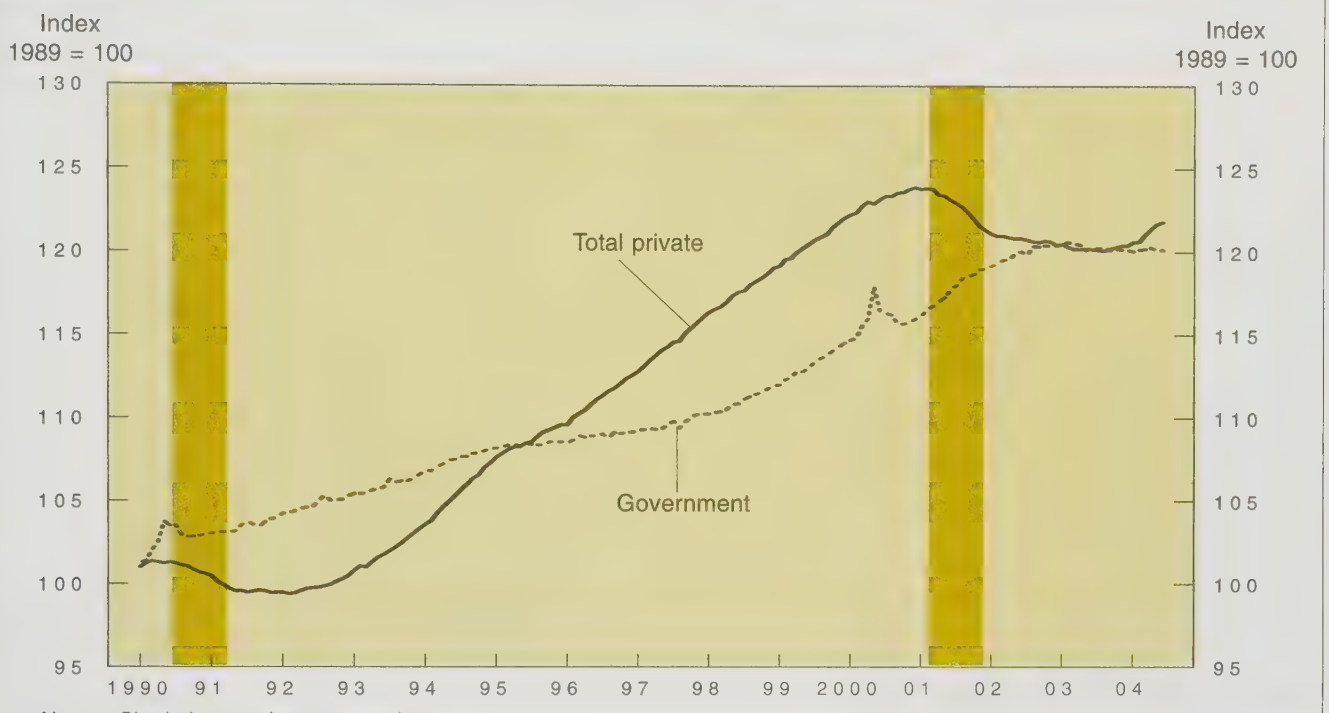
Chart 1. Employees on total private and government payrolls, 1990–2004



NOTE: Shaded areas denote recessions.

States and the District of Columbia. By law, States must have a balanced budget each fiscal year. Local governments, which include those of cities and counties, are often in charge of implementing directives issued from Federal and State governments. Like State governments, localities also must balance the budget each fiscal year.

Government

During the 2001 recession, government gained nearly 400,000 jobs, a sharp contrast to the 72,000 jobs lost during the 1990s recession. (See table 1.) However, the job losses during the earlier recession were due mostly to the laying off of intermittent decennial census enumerators and not economic changes in the industry. Excluding Census effects, government employment continued to grow during the 1990s recession and subsequent recovery.[4] The growth came from State and local payrolls. (See chart 2.) In 1993, the Federal Government began to reduce its civilian employment, while other industries added jobs. The only sector besides State and local government to gain jobs at such a rapid pace throughout both recessions was private education and health services.

Even though government employment continued to grow during the 2001 recession, the momentum gained during the 1990s boom began to wear off. The public sector continued to add jobs, but at a reduced pace, until employment peaked in February 2003. Government reduced payrolls by 97,000 between the peak and June 2004, reflecting job losses in Federal Government.

Federal Government. Opposing employment trends in Federal Government resulted in flatness during the 2001 recession. Small employment declines in the U.S. Postal Service offset small gains elsewhere in the Federal sector. Excluding the Postal Service, Federal Government gained an average 2,000 jobs per month during the recession. In 2002, the hiring of Transportation Security Administration workers outweighed job losses associated with the Postal Service. Federal employment peaked in March 2003 and then declined by 73,000 over the next 15 months.

The terrorist attack on September 11, 2001, affected life in the Nation in profound ways. The U.S. Government's response included the formation of the Department of Homeland Security, which combined a multitude of existing Federal agencies with a new agency, the Transportation Security Administration (TSA).[5] The mission of the TSA is to protect U.S. transportation systems. Initially, the main mission of the agency was overseeing the federalization of airport security. Over the course of 2002, the TSA went from an agency with 13 employees to one with 64,000, most of whom were responsible

Table 1. Employment in selected industries during the 1990 and 2001 recessions, seasonally adjusted

[In thousands]

Industry	1991 recession				2001 recession			
	July 1990	March 1991	Change	Percent change	March 2001	November 2001	Change	Percent change
Total nonfarm	109,773	108,542	–1,231	–1.1	132,507	130,871	–1,636	–1.2
Total private	91,213	90,054	–1,159	–1.3	111,564	109,535	–2,029	–1.8
Construction	5,274	4,881	–393	–7.5	6,864	6,782	–82	–1.2
Manufacturing	17,704	17,141	–563	–3.2	16,931	15,821	–1,110	–6.6
Financial activities	6,628	6,602	–26	–.4	7,798	7,844	46	.6
Professional and business services	10,899	10,705	–194	–1.8	16,764	16,098	–666	–4.0
Education and health services	11,000	11,381	381	3.5	15,465	15,869	404	2.6
Government	18,560	18,488	–72	–.4	20,943	21,336	393	1.9
Federal	3,274	3,095	–179	–5.5	2,754	2,756	2	.1
Federal government, except U.S. Postal Service	2,448	2,277	–171	–7.0	1,876	1,893	17	.9
U.S. Postal Service	826	818	–8	–1.0	878	864	–14	–1.6
State	4,320	4,359	39	.9	4,851	4,977	126	2.6
State government education	1,732	1,761	29	1.7	2,061	2,174	113	5.5
State government, excluding education	2,588	2,598	10	.4	2,790	2,803	13	.5
Local	10,966	11,034	68	.6	13,338	13,603	265	2.0
Local government education	5,919	5,971	52	.9	7,430	7,561	131	1.8
Local government, excluding education	5,047	5,064	17	.3	5,908	6,042	134	2.3

for passenger and baggage screening.[6] As a result, nonpostal Federal employment increased by 76,000 that year, but job losses started in 2003. (See table 2.) A year after reaching a peak in March 2003, the Federal Government, excluding the Postal Service, lost about 50,000 jobs.

The most recent decline in employment follows the post-recession pattern established during the decade of the 1990s, when Federal Government employment decreased by 11.5 percent. The end of the Cold War ushered in a new era, and between 1991 and 2000, the Department of Defense cut about 200,000 civilian jobs from its payroll. (See table 3.) The manufacturing portion of defense, shipbuilding and repairing, followed suit. Between 1991 and 1995, shipbuilding shed almost two-thirds of its workers, and employment flattened out during the last half of the decade.

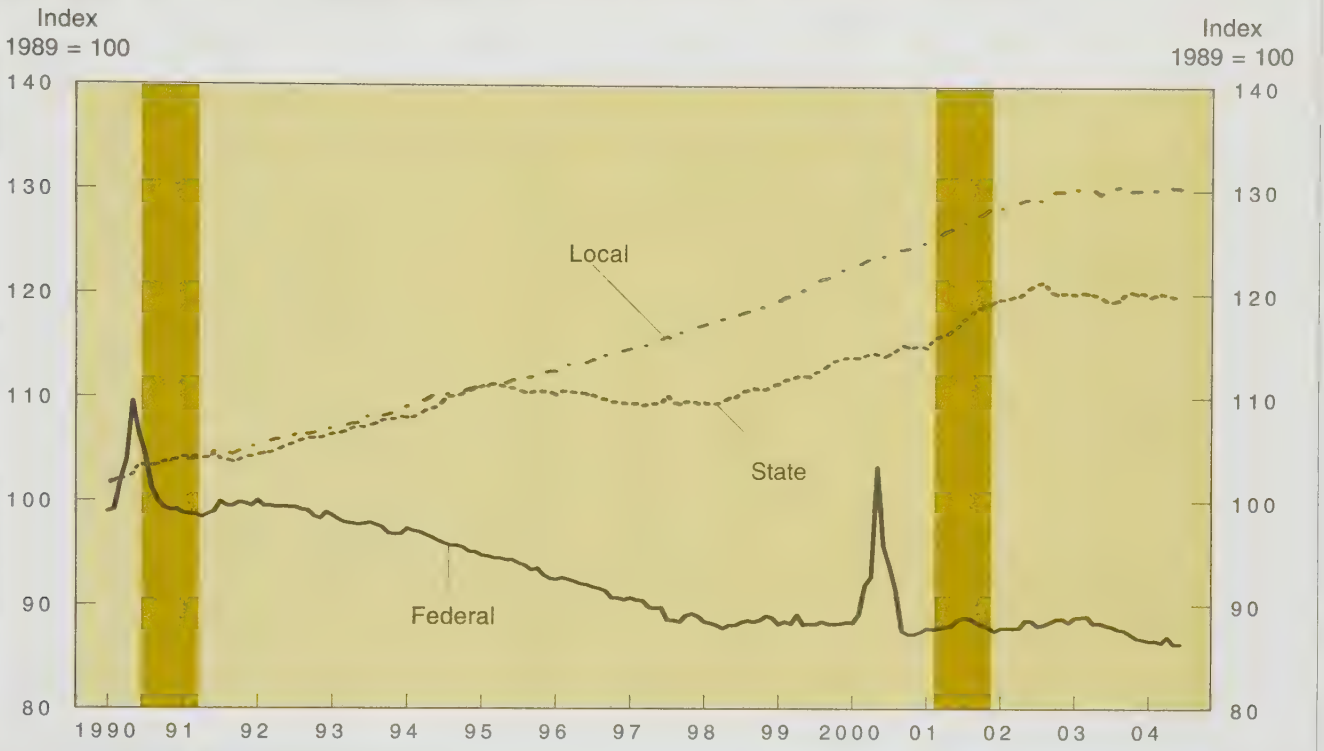
Excluding the Postal Service, Department of Defense, hospitals, and shipbuilding, the industry titled "other Federal Government" lost jobs during the 1990s due to structural changes. Part of the decline may have been defense related, as establishments owned by the Department of Defense, such as military base commissionaires, are classified into that residual category.[7] Equally noteworthy was the effort to reduce and outsource large portions of Federal Government operations throughout the 1990s.[8] As a result, "other Federal Government" lost nearly 200,000 jobs during the period.

In sharp contrast, Postal Service employment behaved in a more cyclical manner. (See chart 3.) The U.S. Postal Service faced difficult problems during fiscal year 1991 as overall mail volume declined for the first time in 15 years. Fiscal year 1992 was not much better, with mail volume barely increasing.[9] Employment was adversely affected by the drop in mail volume, and after declining for several years, it reached a trough in November 1992. As demand for postal services grew, the agency expanded its workforce; however, productivity gains in the latter half of the decade led to slower growth and, eventually, small workforce reductions that continued into the new decade. Overall, the Postal Service had a net gain of 78,000 jobs throughout the 1990s.

Many factors converged to keep employment in the Postal Service on its downward trend. The events of September 11 had an impact on mail delivery in the short term as the Federal Aviation Administration suspended commercial aircraft flights, forcing the Postal Service to switch the delivery of mail from air to surface transportation.[10] While the terrorist attacks and later concerns regarding the mailing of biological agents altered the normal day-to-day operations of the Postal Service, they did not influence the trend of small employment declines through attrition. The agency's finances were affected by the lackluster economy as mail volume fell. Even though the Postal Rate Commission's recommendation of a 3-cent increase for a first-class stamp was approved and went into effect on June 30, 2002, job losses did not abate.[11] The Postal Service also continued its quest for efficient automation in its mail-sorting plants.

Technology, too, plays a role in communication. E-mail is

Chart 2. Employees on Federal, State, and local government payrolls, 1990–2004



NOTE: Shaded areas denote recessions.

not the only alternative to conventional mail service that is chipping away at the Postal Service's traditional costumer base: an estimated 35 million people now pay their bills online, further reducing the need to utilize the U.S. mail system.[12] In fact, other Federal agencies have actively encouraged electronic correspondence. The Internal Revenue Service, for example, has vigorously promoted its E-filing system to taxpayers, and 12 percent more returns were filed through E-file in 2004 than in 2003.[13] As e-commerce has expanded across the U.S. economy, employment in the Postal Service has declined. On average, 2,000 jobs per month have been lost since April 1999.

State government. Not only did employment in State government continue to grow during the latest recession, but it did so at a faster pace: from December 1999 until March 2001, States added 6,000 jobs to payrolls each month, but during the recession, they added 16,000 jobs per month. Education accounted for 90 percent of State employment growth during the recession, similar to the 70 percent that it fueled from 1997 through the end of the decade. During that period, enrollment in public degree-granting institutions increased after several years of declines.[14]

Employment in State government, like that of the Postal Service, is more cyclical in nature. State government's revenue growth tends to lag the national economic cycles by several months, due to delays in tax collections and withholdings. In fiscal year 1991, monetary shortfalls forced 28 States to cut budgets, and even following the official end of the recession in March 1991, 35 States cut their fiscal-year 1992 budgets after they had been passed.[15] Similarly, State employment trends lagged the overall national employment cycle. For example, total nonfarm employment reached a trough in May 1991, whereas State government employment did not slow down significantly until the third quarter of 1991, when 41,000 jobs were lost. The lag was even more pronounced during the most recent downturn: State government employment peaked 17 months after total nonfarm employment, and 80,000 State jobs were lost during the next 11 months.

Due mainly to strength in education, State Government employment continued to grow for several months after the 2001 recession ended. There are several reasons that State education employment grew so fast during that recession. First, colleges and universities still had a substantial amount of money from donations and endowments that resulted from capital gains related to the stock market. Second, people have a tendency to turn to education instead of entering the labor market when hiring is sluggish. Finally, another temporary boom to the

Table 2. Employment in selected industries, December 2001 to June 2004, seasonally adjusted

[In thousands]

Industry	Level				Change				
					2002		2003		2004
	December 2001	December 2002	December 2003	June 2004	Number	Percent	Number	Percent	(number)
Total nonfarm	130,659	130,096	130,035	131,258	–563	–0.4	–61	0.0	1,223
Total private	109,312	108,501	108,491	109,730	–811	–.7	–10	.0	1,239
Construction	6,787	6,695	6,774	6,911	–92	–1.4	79	1.2	137
Manufacturing	15,702	14,899	14,324	14,393	–803	–5.1	–575	–3.9	69
Financial activities	7,833	7,904	7,981	8,049	71	.9	77	1.0	68
Professional and business services	16,087	15,881	16,159	16,457	–206	–1.3	278	1.8	298
Education and health services	15,920	16,401	16,731	16,897	481	3.0	330	2.0	166
Government	21,347	21,595	21,544	21,528	248	1.2	-51	–.2	–16
Federal	2,744	2,771	2,720	2,716	27	1.0	–51	–1.8	–4
Federal Government, except U.S. Postal Service	1,886	1,962	1,929	1,931	76	4.0	–33	–1.7	2
U.S. Postal Service	858	809	791	785	–49	–5.8	–17	–2.1	–6
State	4,992	5,026	5,027	5,004	34	.7	1	.0	–23
State government education	2,186	2,250	2,286	2,258	63	2.9	36	1.6	–28
State government, excluding education	2,806	2,776	2,741	2,746	–30	–1.1	–35	–1.3	5
Local	13,611	13,798	13,797	13,808	187	1.4	–1	.0	11
Local government education	7,577	7,696	7,687	7,695	118	1.6	–9	–.1	8
Local government, excluding education	6,033	6,103	6,110	6,113	70	1.2	7	.1	3

industry was the fact that aid received from States was based on budgets passed before the recession.

The weakening economy eventually caught up with State colleges and universities. State schools receive fiscal assistance from a variety of sources that were affected by the lackluster economy. School endowments shrank as the stock market lost ground. Donors who were once willing to give generous amounts either withdrew their donations from higher education or limited them to lower amounts.[16] Even as fundraising became more difficult for colleges and universities, State legislatures voted to reduce aid; funding for higher education is usually one of the first budget items cut when the economy turns downward.[17] In response, State colleges and universities raised tuition to make up some of the difference. Several State schools raised tuition in mid-2002 for the spring semester, something that had not happened since the early 1990s.[18] During the 2003–04 school year, 49 States increased tuition after several of them already had done so the previous year.[19] Schools also used several other measures to make ends meet, such as limiting or curtailing enrollment, adding more students per class, reducing course options, cutting back on library hours and services, and accepting more out-of-State students, who pay higher tuition rates than in-State students.[20]

During all this time, employment in State education responded to the outside stimulus. Even though the recession ended during the 2001–02 school year, education employment continued to grow at a healthy pace, as it did during the 1990s recession. However, when colleges and universities started back up in the fall of 2002, they did so with 35,000 fewer jobs (seasonally adjusted).[21] When the school year came to a close in July 2003, employment was little changed from the September level. It appears that the measures taken by the public colleges and universities to strengthen their financial pictures shored up employment. The June 2004 employment level was about equal to that of June 2002. In contrast, after the 1990 recession, education employment continued to grow until March 1995, when it declined for 2 years and 38,300 jobs were lost. This mid-decade slump was felt elsewhere in State government also.

Employment in State government, excluding education, responded to the 2001 recession the fastest of any government sector. The recession did not affect State tax collections immediately. Changes in income are usually felt at least 6 months before personal and corporate taxes are collected. In addition, nonwithholding income tax revenues, which result from items such as capital gains, are collected by States on a lagged basis.[22] The faltering economy did eventually have an impact on State tax revenues. Adjusted for the effects of legislation and inflation, revenues collected during the third quarter of 2001 declined by 4.6 percent, compared with revenues collected the year before. A similar decline was evident in the first quarter of 1991, when the year-over-year change in quarterly State tax revenue was 5.0 percent.[23]

Employment in State government, excluding education, was not immediately affected by the 2001 recession. Initially, States relied on several standard budget adjustment tools, such as

Table 3. Post-1990-recession employment in selected industries and annual rates of change, seasonally adjusted

[In thousands]

Industry	Fourth-quarter averages		Change	
	1991	1999	Level	Percent
Total nonfarm	108,263	130,242	21,979	20.3
Total private	89,643	109,744	20,101	22.4
Construction	4,662	6,679	2,017	43.3
Manufacturing	16,958	17,278	320	1.9
Financial activities	6,524	7,671	1,147	17.6
Professional and business services	10,743	16,292	5,549	51.7
Education and health services	11,679	14,910	3,231	27.7
Government	18,620	20,498	1,878	10.1
Federal	3,127	2,768	–359	–11.5
Federal, except U.S. Postal Service	2,319	1,882	–437	–18.8
Federal ship building and repairing[1]	60	23	–37	–61.7
Federal hospitals[1]	235	219	–16	–6.8
Department of Defense[1]	699	516	–183	–26.2
U.S. Postal Service	808	886	78	9.7
Other Federal government[1]	1,314	1,122	–192	–14.6
State	4,354	4,757	403	9.3
State government education	1,774	2,018	244	13.8
State government, excluding education	2,580	2,739	159	6.2
State hospitals[1]	417	345	–72	–17.3
State government general administration[1]	1,670	1,862	192	11.5
Other State government[1]	474	515	41	8.6
Local	11,139	12,972	1,833	16.5
Local government education	6,008	7,212	1,204	20.0
Local government, excluding education	5,132	5,760	628	12.2
Local government utilities[1]	232	224	-8	–3.4
Local government transportation[1]	199	228	29	14.6
Local hospitals[1]	656	624	–32	–4.9
Local government general administration[1]	3,281	3,756	475	14.5
Other local government[1]	695	861	166	23.9

[1] Data are not seasonally adjusted.

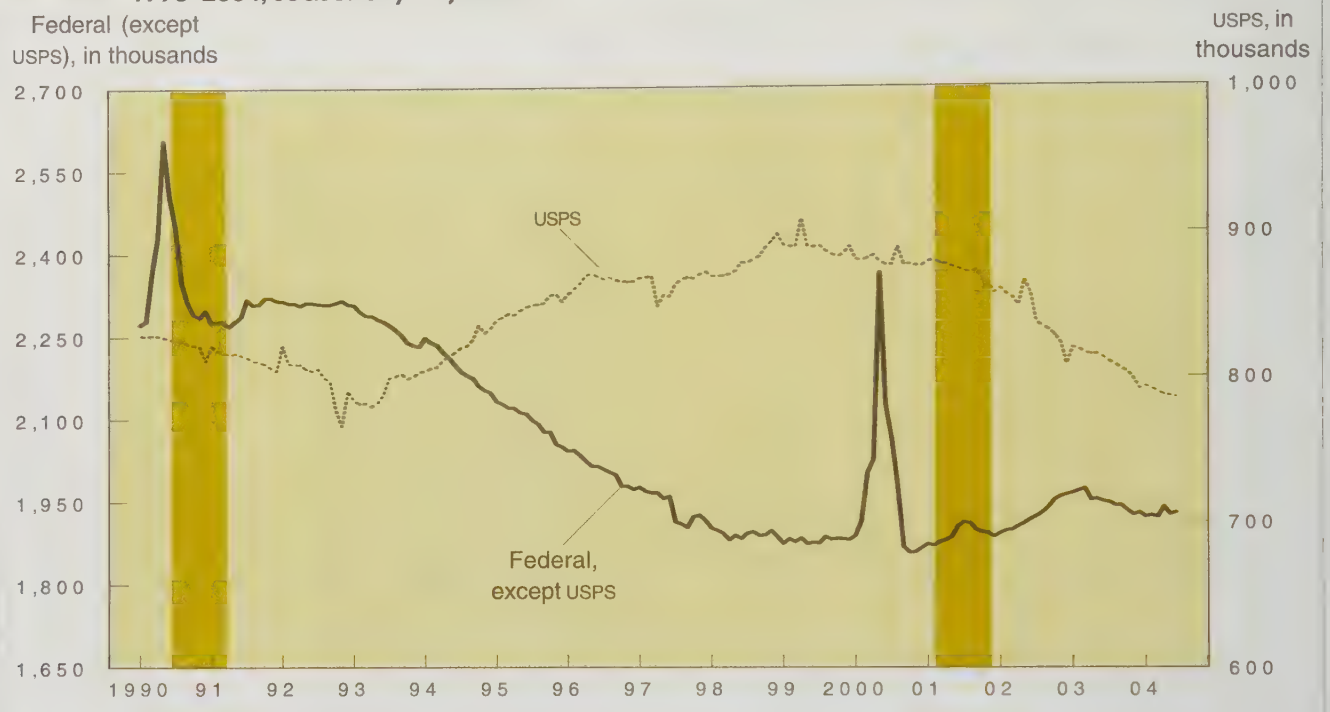
across-the-board cuts, rainy-day funds, and the reorganization of programs to shore up their budgets and, therefore, employment.[24] But these solutions were not enough to overcome tax revenues that continued to fall. State noneducation employment peaked in December 2001, a month after the recession officially ended. Similarly, excluding education, State employment had peaked 1 month before the 1991 recession ended.

The current picture contrasts sharply with the 1990s postrecession period. At the end of 1991, State employment, excluding education, started to recover and continued to grow, until peaking in January 1995. (See chart 4.) The 2001 recession affected this sector the fastest and hardest of any government sector.[25] Once the recession ended, the problems for States only got worse. By the second quarter of 2004, employment had fallen to the levels of early 2000, although employment had been relatively unchanged since July 2003. The budget problems that became apparent in fiscal year 2001 eventually developed into the worst financial situation in 60 years. Thirty-seven States cut their budgets by the cumulative sums of $12.6 billion and $14.5 billion in fiscal years 2002 and 2003, respectively. Additional methods used to balance budgets included employee layoffs, early retirements, reduced aid for higher education and localities, and other measures.[26] Budgets had started to improve slightly by the third quarter of 2003, coinciding with the improved labor market picture.[27] Even though fiscal conditions improved for fiscal year 2004, they fell short of prerecession levels, as did employment for the same period.

Local government. Like State government, local government added jobs at a faster pace during the recession. In 2001, local government employment grew by 2.9 percent, compared with an average of 2.1 percent for the previous 5 years. During the recession itself, localities gained 33,000 jobs per month, split equally between the education and noneducation components. Growth during the 1990s recession had not been as robust, but strength in education allowed local government to expand employment by 68,000.

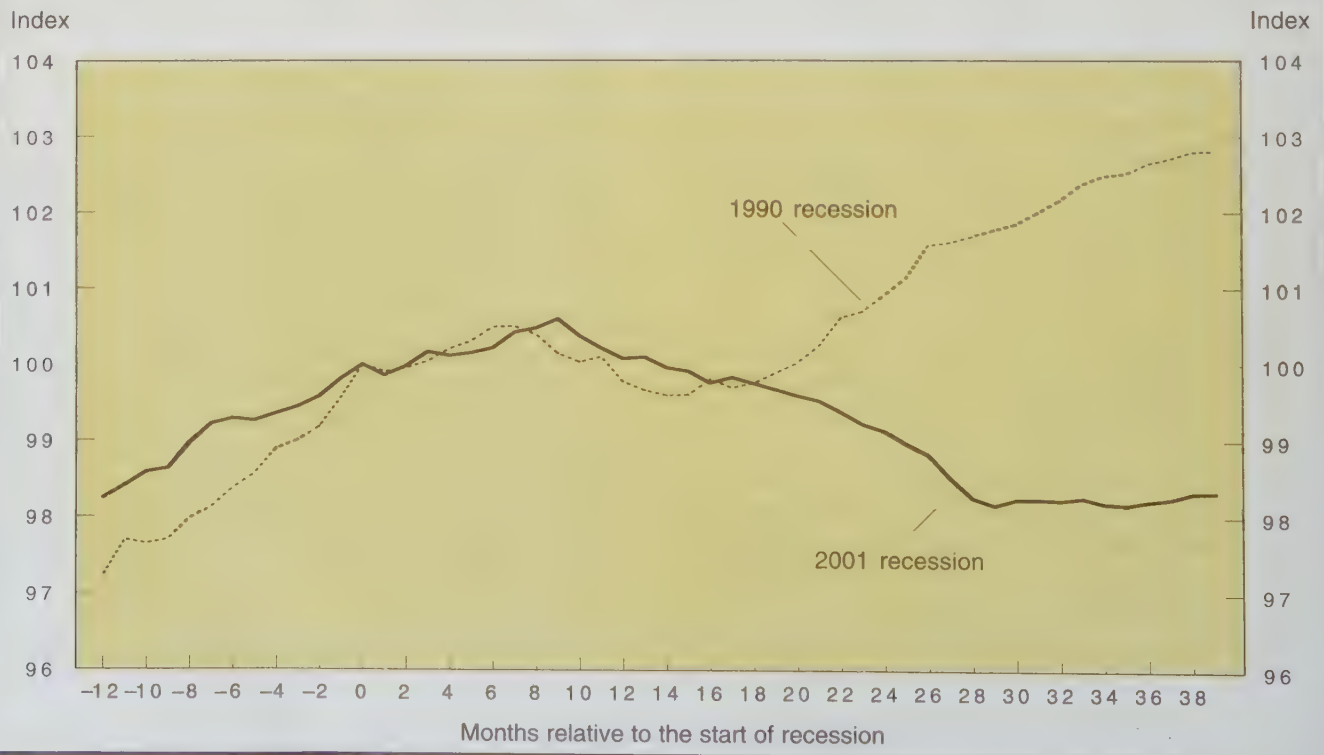
Education continued to fuel job growth in local government throughout the 1990s, with approximately 2 out of every 3 new jobs created in education. Enrollment in public elementary and secondary schools grew 14 percent from the fall of 1990 to the fall of 1999.[28] Local education is the largest component industry

Chart 3. Employees on Federal (except U.S. Postal Service) and U.S. Postal Service payrolls, 1990–2004, seasonally adjusted



NOTE: Shaded areas denote recessions.

Chart 4. Employment in State government, excluding education, seasonally adjusted data, indexed to the start of the recession

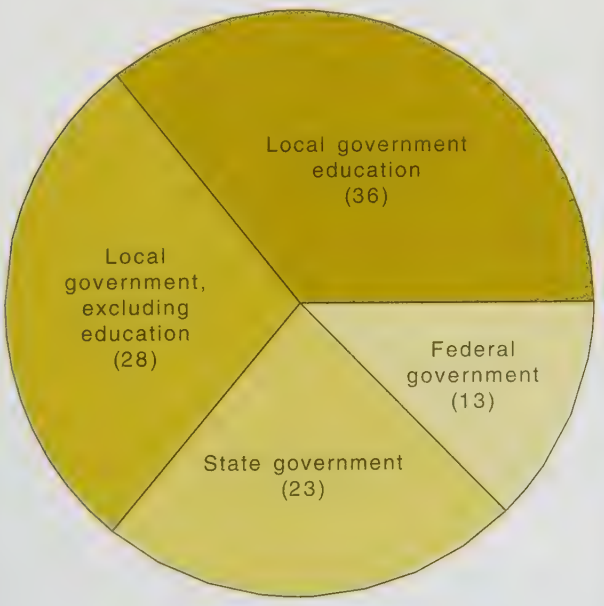


within government (see chart 5) and typically adds a noteworthy number of jobs each year.

Education was not the only growth industry in local government. More than half a million jobs were created in local administration during the 1990s. The residual industry, other local government, which includes components such as libraries, recreation and park authorities, cemeteries, and housing authorities, was the fastest-growing industry. Overall, local government gained almost 2 million jobs during the decade.

The delayed impact of the 2001 recession on local government resulted in job gains. Local governments have a wealth of revenue sources, some more dependent on economic conditions than others. Revenue sources such as sales and income taxes and fees for services are more likely to be affected by both positive and negative changes in economic activity. Property tax, in contrast, weathers economic storms better, creating a short-term safe harbor for localities.[29] During the 2001 recession, the healthy housing market raised the value of residential real estate. Localities in turn reassessed properties, boosting their property tax bases without actually raising tax rates. In addition, cities receive funding from State governments. Because recessionary effects did not have an impact on State budgets immediately, local governments were affected on a lagged basis.

Chart 5. Percent of government employment, 2003



Cities operate on balanced-budget requirements, so they usually try to end the fiscal year with a surplus, which can then be used as revenue for the next year or can be set aside in anticipation of an upcoming economic downturn. According to a survey administered by the National League of Cities, the ending balance as a percentage of expenditures in 2001 was at the highest point, 19.1 percent, since the series began in 1985.[30] It is important to remember that many cities end their fiscal year on June 30 or September 30. Thus, the financial impact of the terrorist attacks on September 11, 2001, would likely be more apparent in fiscal year 2002. The strength in the ending balances is mirrored in the positive employment situation for local government during 2001.

The trickle-down effect slowed the impact of the recession on local governments, but eventually, the weak economy took its toll on budgets and payrolls. From 1977 to 2004, Federal aid to cities declined from 15 percent to 5 percent of total city revenues. In addition, aid from States was reduced $2.3 billion in fiscal year 2004 from fiscal year 2003, a sharp contrast to the past, when downturns were marked by a slowing rate of revenue growth, not an actual reduction in revenue.[31] Localities took various measures in response to reduced funding. For example, according to the National League of Cities, nearly half of the 328 cities surveyed in 2003 increased fee rates, 30 percent reduced city employment, 29 percent imposed new fees or charges on services, 21 percent reduced actual levels of capital spending, and 11 percent reduced city service levels.[32] The deteriorating fiscal conditions eventually affected employment. During 2002, half as many jobs were added in local government as were added in 2001, and by 2003 growth had come to a standstill.

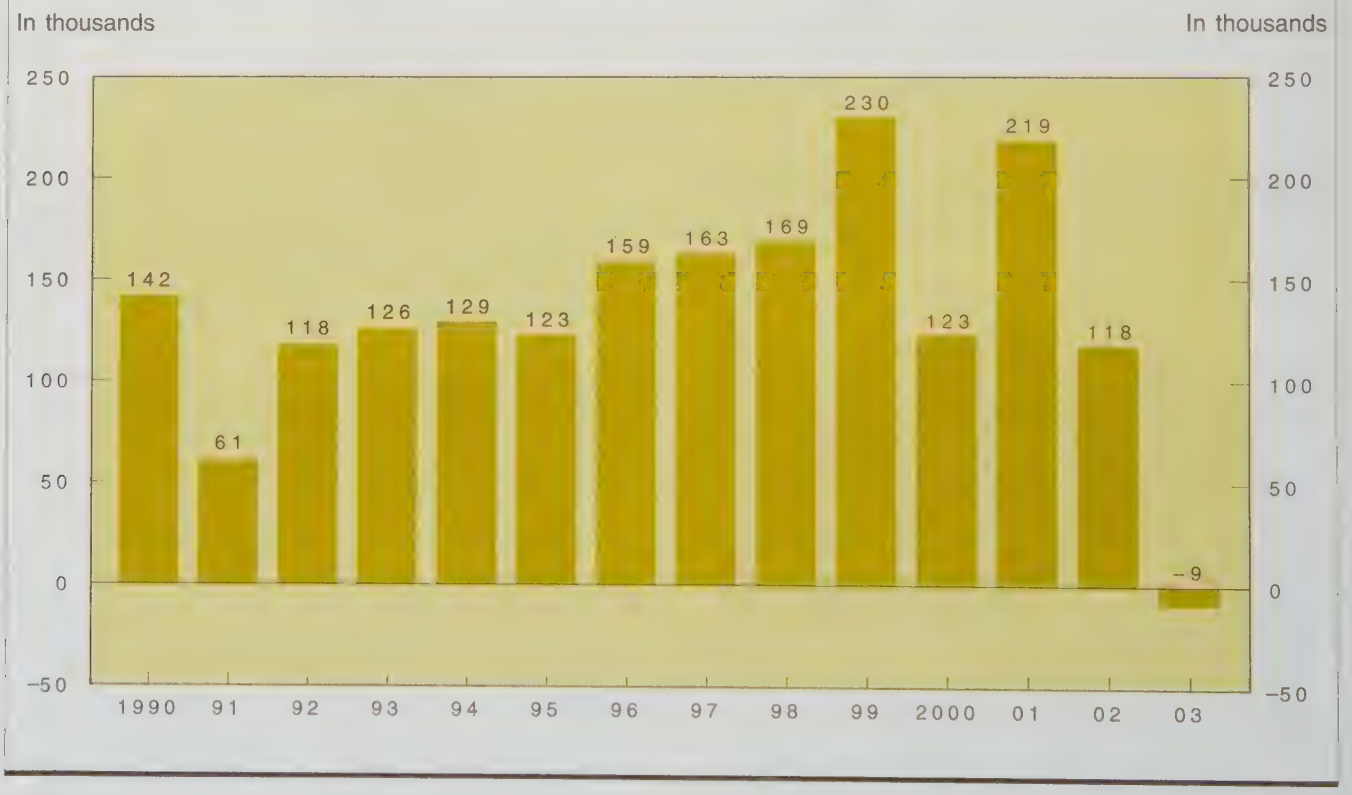
Excluding education, growth in local employment slowed from 2.5 percent in 2001 to 0.1 percent in 2003. During the first half of 2004, employment was essentially unchanged. In addition to budget woes, localities faced new challenges as a result of the terrorist events of September 11. When the terrorism alert becomes elevated, police and other security personnel are stationed at crucial or vulnerable locations. According to the U.S. Conference of Mayors, the total cost of Code Orange to all localities combined is around $70 million per week.[33] In response, Congress added to the Department of Homeland Security funding bill a provision to help fund first-responder programs.[34]

Another Federal mandate also challenged local governments. The Federal role in education has been limited by the Tenth Amendment to the U.S. Constitution, and most education policy is decided at the State and local levels. However, on January 8, 2002, the No Child Left Behind Act of 2001 was signed into law. The Act redefines the Federal role in primary education and is grounded on four basic principles: stronger accountability for results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work.[35] Funding for the new law has become an

important issue. According to a study performed by the National Conference of State Legislatures, there was a shortfall of almost $10 billion in fiscal year 2004 between the amount Congress was authorized to give and the amount that was appropriated.[36] Besides the added costs of implementing the Act, the States' budget crises had a detrimental effect on local education employment. From 1990 until 2001, local education averaged an employment increase of 147,000 a year. But during 2002, schools added 118,200 jobs, and by 2003, growth in local education came to an abrupt halt. (See chart 6.) Local education employment has remained relatively flat since the start of the 2003–04 academic year and has not been this weak since the early 1980s, coincidentally with two recessionary periods.

GOVERNMENT EMPLOYMENT GREW DURING THE 2001 RECESSION, with most components performing much better than in the 1990s recession. Several factors made the latest post-recession period different from any other. The terrorist attacks of September 11 led to the creation of the TSA within the Federal government, but, at the same time, strained the budgets of States and localities. The worst State fiscal crisis in decades affected not only State government employment, but local employment as well. Unfunded Federal mandates for additional security and education put further burdens on State and local governments. Technological improvements in mail sorting and a shift in how Americans communicate forced the U.S. Postal Service to reduce employment. Offsetting higher costs of doing business and reduced funding, the strong housing market boosted property values and enabled localities to collect more property tax revenue without raising rates. □

Chart 6. Employment in local government education, over-the-year change, 1990–2003, seasonally adjusted



Notes

[1] Data on employment used in this article are from the Current Employment Statistics (CES) program, which surveys 160,000 nonfarm businesses representing about 400,000 establishments monthly. For more information on the program's concepts and methodology, see *BLS Handbook of Methods* (Bureau of Labor Statistics, 1997). CES data are available on the Internet at **http://www.bls.gov/ces/**. Data used in this article are seasonally adjusted unless otherwise noted.

[2] For information on recessions, recoveries, the National Bureau of Economic Research Business Cycle Dating Committee, and related topics, see **http://www.nber.org/cycles/main.html**.

[3] Gross domestic product grew 2.6 percent in the second quarter of 1991 and increased every quarter until the third quarter of 2000. The U.S. Department of Commerce's Bureau of Economic Analysis pro-

duces estimates of gross domestic product; for more information, visit the agency's website at **http://www.bea.gov/bea/dn/home/gdp.htm**.

[4] Intermittent decennial census workers are excluded from the analysis because their large, infrequent buildup and subsequent layoff skews the underlying employment trend. For more information about the 2000 Decennial Census and its impact on CES employment, see Laura Kelter, "Counting the counters: effects of Census 2000 on employment," *Monthly Labor Review*, February 2000, pp. 24–29; on the Internet at **http://www.bls.gov/opub/mlr/2000/02/art2full.pdf**.

[5] For more information on the Department of Homeland Security, see **www.dhs.gov**.

[6] For more information on the Transportation Security Administration, see **www.tsa.gov**.

[7] Department of Defense operations that operate under non-appropriated funding are excluded from the agency's job numbers, but are included in the "other Federal Government" category. Non-appropriated funds are funds generated by Department of Defense military and civilian personnel and their dependents and are used to augment funds appropriated by the Congress "to provide a comprehensive, morale-building welfare, religious, educational, and recreational program designed to improve the well-being of military and civilian personnel and their dependents" (quote cited on the Internet at **http://usmilitary.about.com/library/glossary/n/blglossary.htm**).

[8] The National Partnership for Reinventing Government, formerly the Government Performance and Results Act, focused on performance and funding in the Federal Government. According to one source, "This effort has streamlined the Government work force, eliminated obsolete programs and agencies, empowered its employees to cut red tape, and used partnerships to get results" (*FY2002 Economic Outlook, Highlights from FY 1994 to FY 2001*, FY 2002 Baseline Projects, Office of Management and Budget, Executive Office of the President of the United States, January 2001), available on the Internet at **http://w3.access.gpo.gov/usbudget/**.

[9] The Federal Government's fiscal year runs from October 1 to September 31. (See "History of the U.S. Postal Service"; on the Internet at **http://www.usps.com/history/his3_5.htm#CHANGE**.

[10] *United States Postal Service Annual Report 2001*; available on the Internet at **http://www.usps.com/history/anrpt01/**.

[11] "Sluggish Economy and Reduced Mail Volumes Continue to Impact Postal Service Finances," *Postal News*, Apr. 9, 2002, release no. 02–024; on the Internet at **www.usps.gov**.

[12] Jefferson Graham, "The check is not in the mail," *USA Today*, Mar. 25, 2004; on the Internet at **http://www.usatoday.com/money/perfi/general/2004-03-25-billpay_x.htm**.

[13] For more information, visit the website **www.irs.gov**.

[14] *Digest of Education Statistics 2002* (U.S. Department of Education, National Center for Education Statistics, Nov. 24, 2003), Chapter 3, "Postsecondary Education." A copy of the report is available on the Internet at **http://nces.ed.gov/programs/digest/d02/ch_3.asp**.

[15] National Association of State Budget Officers, *Fact Sheet: Quick Rebound? State Fiscal Recovery Could Be Gradual, Lag National Economy 12–18 Months*, Mar. 12, 2002. Forty-six states begin their fiscal years in July and end them in June. The exceptions are Alabama and Michigan, with an October-to-September fiscal year; New York, with an April-to-March fiscal year; and Texas, with a September-to-August fiscal year. For more information, visit the association's website, **www.nasbo.org**.

[16] Greg Winter, "Charitable Giving Falls for First Time in Years," *The New York Times*, Oct. 27, 2003.

[17] National Association of State Budget Officers, *2002 State expenditure report*; on the Internet at **www.nasbo.org**.

[18] Liz Sidoti, "Yikes! Mid-Year Tuition Hikes," Jan. 8, 2002; on the Internet at **CBSNEWS.com**.

[19] "Tuition up in 49 states as schools, students struggle in tough times," *USA Today*, Aug. 25, 2003.

[20] For more information about public colleges' and universities' decisions, see Shaun Bishop, "Cuts may force UC to accept more out-of-State students," *The Daily Bruin Online*, Sept. 26, 2003; Amy Argetsinger, "Colleges' Chief Suggests Enrollment Cap," *Washington Post*, June 11, 2003; and Mary Beth Marklein, "Colleges brace for bigger classes and less bang for more bucks," *USA Today*, Aug. 27, 2003.

[21] State education unadjusted fall buildup begins in August and ends in November.

[22] National Association of State Budget Officers, *Fact Sheet: Quick Rebound?*

[23] Data are from Nelson A. Rockefeller Institute of Government Revenue Report Database; on the Internet at **http://rockinst.org**.

[24] National Association of State Budget Officers, *Budget Shortfalls: Strategies for Closing Spending and Revenue Gaps*, 3d ed., December 2002.

[25] Although U.S. Postal Service employment declined by 1.6 percent during the recession, job losses were mostly the result of technological improvements and not the recession.

[26] National Association of State Budget Officers and the National Governors Association, *The Fiscal Survey of States: June 2003*; on the Internet at **www.nasbo.org**.

[27] "State Tax Revenue Continues Slow Improvement," *The Rockefeller Institute State Fiscal News*, vol. 4, no. 1.

[28] *Digest of Education Statistics 2002* (Department of Education, National Center for Education Statistics, Nov. 24, 2003), Chapter 2, "Primary and Secondary Education"; a copy of the report is available on the Internet at **http://nces.ed.gov/progams/digest/d02/ch_2.asp**.

[29] Chris Hoene, "History, voters not kind to property tax," *The Weekly*; posted on the Internet on May 14, 2001, at **www.nlc.org**.

[30] Michael A. Pagano and Christopher Hoene, "Survey Summary: City Fiscal Conditions Decline for First Time in a Decade"; on the Internet at National League of Cities website, **www.nlc.org**.

[31] Chris Hoene and Michael Pagano, "States Cut $2.3 Billion in Aid to Cities and Towns"; on the Internet at the National League of Cites website, **www.nlc.org**.

[32] "Cities Cut Services, Increase Fees to Confront Worsening Fiscal Squeeze," press release, the National League of Cities, Nov. 30, 2003.

[33] Richard S. Dunham, ed., "America's Cities are Seeing Red over Code Orange," *Business Week*, June 9, 2003, p. 55.

[34] For more information, visit the Department of Homeland Security website at **www.dhs.gov**.

[35] For more information, visit the Department of Education website at **www.ed.gov**.

[36] National Conference of State Legislatures, *Task Force Formed to Examine Federal No Child Left Behind Act*, Mar . 30, 2004; on the internet at **www.ncsl.org**.

Earning less, rationally

Workers sometimes change employers to get higher wages. True enough, but there are also cases where workers earn less in new jobs. Some of these cases involve workers who involuntarily left their old job and only take a lower-paying job after being unable to find anything at their old wage level. But what about those cases involving workers who voluntarily leave higher-paying jobs for lower-paying ones?

One idea is that workers accept lower wages in a new job if it is an entry-level position in a career that will eventually allow them to earn more than they would ever earn in their previous occupation. For example, a teacher might leave teaching and work as an accountant, even if that meant earning less in the new occupation for the first few years.

In *Economic Commentary* (published by the Federal Reserve Bank of Cleveland), Peter Rupert puts forth another hypothesis to explain why workers trade higher-paying jobs for lower-paying ones. "It's not always about the money," is his conclusion.

Wages are only part of a job's "value" for a worker. Besides wages, a worker also obtains "amenities" from a job: intangible benefits such as the enjoyment of a good workplace environment, pleasant working conditions, a certain cachet, or some other *je ne sais quoi*.

Employers offer various combinations of wages and amenities. In doing so, they find that it's possible to trade off one for the other. In other words, it's not necessary to offer both high wages and all the amenities. This trading off between wages and amenities is called "compensating differentials."

Workers, continually learning about the wages and amenities of various jobs, move from one job to another. Their goal is to maximize both the wages and the amenities they accrue over their working lives. A worker's ideal job would be one with high wages and the worker's preferred amenities. But such a job is hard to find. Thus, at one point in their lives workers might give up amenities in order to earn higher wages. At some other time, they might do the opposite; the accountant becomes a teacher.

Thinking about a job's value in terms of both wages and amenities leads to the observation that income alone can be a misleading measure of things such as the quality of life or well-being on the job. Whether comparing individuals who live across town or across oceans, job characteristics other than wages should also be considered.

Time stress and its causes

In "Stressed out on four continents: Time crunch or yuppie kvetch?" (National Bureau of Economic Research, Working Paper Series) Daniel S. Hamermesh and Jungin Lee take an economic approach to explain time stress and its causes.

The authors propose an economic function depicting households maximizing their utility in the face of some time constraint. The results show that the binds of the time constraint, that is, time stress, increases along with increases in income.

The authors test their hypothesis by looking at measures of time stress from surveys of working couples in Australia, Canada, Germany, Korea, and the United States. Reports of time stress were more common in high-income, two-income families. Analysis shows that additional hours of work do generate additional time stress, but also, when hours of work are held constant, increases in time stress are also associated with increases in income. The same result was seen in all five countries, but was strongest in North America.

Why should this be? After all, no matter what a person's income may be, the number of hours in a week remains constant—168.

Part of increased time stress might be the stress that comes with high-paying occupations. But not all of the increase can be attributed to these factors. The authors ask if this is time crunch or kvetch (complaining). And their answer isn't too far from saying that oftentimes cases of time stress are basically cases of too much money and not enough time to spend it. The more money one has, the more demands there are on one's time. As the authors say, "Time stress is analogous to poverty... One is a lack of time, the other, a lack of money."

The authors observe that busy lifestyles of the economically comfortable should be seen as more of a blessing, evidence of the myriad of options and opportunities that are available to those who can afford them.

The paper goes on to show that time stress will probably increase over time. Future higher standards of living will mean more opportunities for people to buy and do more, and this will cause increased feelings of missing something when there isn't time enough to try everything.

They close with the observation that while answering "crunch or kvetch?" is a matter of values, it may be more ethical to direct public sympathy (itself a scarce commodity) to those who suffer from the "goods constraint" than those for whom the "time constraint" is the problem—that's the economist's way of saying the poor instead of the financially well-off.

We are interested in your feedback on this column. Please let us know what you have found most interesting and what essential readings we may have missed. Write to: Executive Editor, *Monthly Labor Review*, Bureau of Labor Statistics, Washington, DC, 20212, or e-mail, mlr@bls.gov.

A history of economics

The Ordinary Business of Life: A History of Economics from the Ancient World to the Twenty-First Century. By Roger E. Backhouse. Princeton, NJ, Princeton University Press, 2002, 369 pp., $55/cloth.

Roger Backhouse, in his book, *The Ordinary Business of Life*, explains that economics does not have a founder because people have always thought about ideas we think of as economics. Throughout history people have probed how social economic policy might improve the lot of humankind.

The book pursues the origins of economic theory through a wide range of intellectual history. As various schools of economic thought construct divergent views of history, this book provides economists with an idea of how each theory fits into the bigger picture. Backhouse emphasizes that ethical presuppositions undergird modern economics as much as they did Homeric poetry and the Old Testament. Because economic ideas are an integral component of culture, the history of economics must touch on the histories of religion, theology, philosophy, mathematics, and science.

The author begins with a description of economic thought in the Mediterranean cultures and then examines the effects of Judaism, Christianity, and Islam. Prosperity in Homer's age (c. 850 B.C.) meant a well-ordered estate. The people of the Periclean Age (479 to 431 B.C.) engaged in profit-making activities, like commodity speculation that we now associate with a commercial society. Plato (429–347 B.C.) recommended a just society organized on rational principles. The origin of the word economics comes from a book titled *Oikonomikos* (meaning household management), written by Xenophon (430–354 B.C.) in which he explains how a prosperous agricultural estate is the result of skilled organization.

The destruction of the Greek city-states actually resulted in the promulgation of Greek mathematics, science, and philosophy to the rest of the world. The Roman Empire (27 B.C. to 312 A.D.) articulated significant economic ideas in their commercial law, and the concept of Reasonableness, coming from Greek Stoicism, was found widely in Roman legislation.

Judaic and Christian ideals greatly influenced the Middle Ages that followed the Fall of Rome. In Judaism, "There was ... a clear distinction between the pursuit of wealth...and the wealth that arose through following God's commands." During the Middle Ages, Christianity exalted poverty as the highest expression of humility, but while working to educate the people and spread Christianity, Charlemagne, in the early 800s, urged better farming methods and set up money standards to encourage commerce.

The 9th century was the dark age of Christian Europe. Muslims controlled most of Spain. The Vikings dominated the north. Yet Christian Europe survived, primarily because of monastic cells and feudalism. The combination of highly disciplined religious orders with military power provided the basis for the European resurgence.

At the developing universities of the 12th century, scholars formulated ideas to guide society based on Biblical principles, Aristotelian ideas, and Natural Law (moral principles common to all). New lines of inquiry opened up in the 14th and 15th centuries when rational argument combined with traditional theology. The rise of Protestantism in the 16th century was a significant factor of economic growth in England and the Netherlands; and, more and more, natural law (moral principles) replaced canon law. Machiavelli's *The Prince* in the early 16th century departed from politics based on moral laws to politics distinct from morality altogether. In the 17th century, the contradictory passions Machiavelli described came to be known as "interests."

Academics in the early 17th century were looking for a firm foundation on which knowledge could rest independent of the church. Bacon and Descartes offered what they believed to be a better foundation for truth—namely, experimental science and a set of self-evident mathematical truths. The Royal Society, chartered in 1662, laid down procedures for how to conduct experiments and report results.

William Petty (1623–87), a pioneer in viewing economic phenomena from a quantitative perspective, estimated England's wealth in terms of land, labor, and capital. Josiah Child and John Locke, also in the 17th century, examined monetary economics, analyzing the relationship between money supply and price level.

The 18th century Enlightenment owed greatly to the scientific revolution that embodied a belief in reason, progress, liberty, and tolerance. The scientific revolution was a worldview shift. Mechanical laws that governed the universe discovered by Copernicus, Kepler, Galileo, Descartes, and Newton, led to humanism, thus reducing God to a divine clock-maker who merely set the universe in motion. Morality came to be linked to utilitarianism.

Mercantilism—an economic policy that promoted the use of state power to build up industry, to maintain a surplus of exports over imports, and to accumulate large amounts of precious metals—prevailed in Europe from the 15th to the 18th centuries. The man often regarded as the founder of modern economics, Adam Smith (1723–90), denounced mercantilism. He argued that self-interest led to efficient use of resources and public welfare (the Invisible Hand). Backhouse mentions that Adam Smith's emphasis on the importance of a capitalist society's secure framework of law, morality, and property rights is an essential lesson for reformers moving from

socialism to capitalism (for example, the former Soviet republics).

Smith's ideas became the basis of so-called classical political economy, which placed doctrinaire laissez-faire at one end and Ricardian socialism at the other. Arnold Toynbee (1852–83) believed that ethics could not be separated from economics, inspiring a generation of Oxford students to pursue economic science from the vantage point of improving economic conditions for the common man.

In the early 20th century, the central figure in economics was Knut Wicksell of Sweden, who developed a business cycle theory by describing the relationship between money, credit, and prices. The boon of the 1920s set the stage for the Great Crash. Acknowledging the inadequacy of the dominant pre-war theories to explain the Depression and searching for guidelines to avoid another, economists examined Knut Wicksell's business cycle. In Austria, Ludwig von Mises and Friedrich von Hayek translated Wicksell's ideas into a monetary theory of the business cycle, advocating non-government intervention and a policy of 'neutral' money. In contrast, Swedish Erik Lindahl (and others) based their interpretation of Wicksell's theory on expectations about the future and promoted government spending and monetary policy to reduce unemployment.

In England, thinking about money and the business cycle was rooted in the work of Alfred and Mary Marshall (1842–1924 and 1850–1944, respectively). They believed, similar to Lindahl, that "The chief cause of ... [Depression] is want of confidence." Among Marshall's followers was John Maynard Keynes (1883–1946). Keynes' General Theory provided enormous stimulus to the idea that government should take responsibility for controlling economic activity. Keynes' theory of economics largely dominated the field because it provided a framework that could be translated into very versatile mathematical models. A number of economists interpreted Keynes' ideas through a system of equations. The most influential of these was John Hicks with the IS-LM model. John Hicks, in 1940, introduced the equation that has become the cornerstone of national-income accounting: $GNP = C + I + G$. He also restated the General-Equilibrium Theory in modern terms (introduced in the late 19th century), which came to be the central theoretical framework in the 1940s and 1950s.

During World War II, estimates of national income became formal systems of national accounts, leading to the first standard system of national accounts in 1953. The next year, Kenneth Arrow and Gerard Debreu published improved proof of the existence of general equilibrium. Questions their theory left unanswered were resolved in game theory (originally put forward by John von Neumann in the 1920s), which proved there will always be an equilibrium. Econometric models brought together Keynesian economics and national-income accounting, and Lawrence Klein's large-scale macroeconometric models were used greatly for forecasting in the 1960s and 1970s.

Paul Samuelson's theory of public goods (one person can benefit without reducing the benefits to another) fit well in the 1960s belief that the government should intervene at the macroeconomic level. Confidence in the econometric approach was strengthened with the advent of computers and renewed interest in game theory.

The Keynesian consensus concerning employment factors was overturned with Milton Friedman's work on the natural rate of unemployment. This led to New Classical Economics of the 1970s—an explanation of the economy in terms of continuous market clearing, rational expectation, and the "real business cycle" based on "real" shocks to the economy, primarily shocks to technology. Also in the 1970s, economists focused on the study of law and economics, public-choice theory, property rights, and transaction costs. Over the years, the distinction has lessened between macro and microeconomics, and economists continue to look for a framework within which to resolve economic theoretical differences.

The question of the place of mathematics in economics is a major theme of the book. Doubts about the mathematization of economics have gone in cycles. At the end of the 19th century, Jevons and Walras maintained that economics was inherently mathematical. Carl Menger objected to mathematical economics, which he maintained was able only to show the relationship between quantities, not the essence of economic phenomena. Alfred Marshall, in his discussion of supply and demand and a money-based theory of utility, was also skeptical of mechanical explanations of economic change. The author points out that the goal of using econometric techniques and empirical data to build economic theory has never really been accomplished and that key economic assumptions are, and always have been, based on their being intuitively rational.

Schumpeter in the 1940s claimed there was no logical order to the jumble of applied fields of economics, and Backhouse declares that this is still the case—except that each of the fields increasingly relies on a theoretical core; and that, because of that theoretical core, one might say economists speak different dialects of a shared language.

Throughout his story, Roger Backhouse illuminates the human side of economics, showing how the economic sciences have never veered significantly from the goal of finding a way to improve the human condition.

—Ellen Messing

Consumer Price Computer Systems,
Bureau of Labor Statistics

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This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of current and past experiences. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 17–21, 48, and 52. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 2004 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 were revised in the March 2004 *Review*. A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 54 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

http://www.bls.gov/cps/

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

http://www.bls.gov/ces/

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment*.

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments;* and *Employee Benefits in State and Local Governments*.

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

http://www.bls.gov/lpc/

For additional information on international comparisons data, see *International Comparisons of Unemployment*, Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry*, a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in

table 2. Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–29)

Household survey data

Description of the series

Employment data in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 60,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*. For a discussion of changes introduced in January 2003, see "Revisions to the Current Population Survey Effective in January 2003" in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at: **http://www.bls.gov/cps/rvcps03.pdf**).

Effective in January 2003, BLS began using the X-12 ARIMA seasonal adjustment program to seasonally adjust national labor force data. This program replaced the X-11 ARIMA program which had been used since January 1980. See "Revision of Seasonally Adjusted Labor Force Series in 2003," in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at **http:www.bls.gov/cps/cpsrs.pdf**) for a discussion of the introduction of the use of X-12 ARIMA for seasonal adjustment of the labor force data and the effects that it had on the data.

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

Establishment survey data

Description of the series

Employment, hours, and earnings data in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 160,000 businesses and government agencies, which represent approximately 400,000 individual worksites and represent all industries except agriculture. The active CES sample covers approximately one-third of all nonfarm payroll workers. Industries are classified in accordance with the 2002 North American Industry Classification System. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted

in each establishment which reports them.

Production workers in the goods-producing industries cover employees, up through the level of working supervisors, who engage directly in the manufacture or construction of the establishment's product. In private service-providing industries, data are collected for nonsupervisory workers, which include most employees except those in executive, managerial, and supervisory positions. Those workers mentioned in tables 11–16 include production workers in manufacturing and natural resources and mining; construction workers in construction; and nonsupervisory workers in all private service-providing industries. Production and nonsupervisory workers account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Table 17 provides an index on private nonfarm employment based on 278 industries, and a manufacturing index based on 84 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The March 2003 benchmark was introduced in February 2004 with the release of data for January 2004, published in the March 2004 issue of the *Review*. With the release in June 2003, CES completed a conversion from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) and completed the transition from its original quota sample design to a probability-based sample design. The industry-coding update included reconstruction of historical estimates in order to preserve time series for data users. Normally 5 years of seasonally adjusted data are revised with each benchmark revision. However, with this release, the entire new time series history for all CES data series were re-seasonally adjusted due to the NAICS conversion, which resulted in the revision of all CES time series.

Also in June 2003, the CES program introduced concurrent seasonal adjustment for the national establishment data. Under this methodology, the first preliminary estimates for the current reference month and the revised estimates for the 2 prior months will be updated with concurrent factors with each new release of data. Concurrent seasonal adjustment incorporates all available data, including first preliminary estimates for the most current month, in the adjustment process. For additional information on all of the changes introduced in June 2003, see the June 2003 issue of *Employment and Earnings* and "Recent changes in the national Current Employment Statistics survey," *Monthly Labor Review*, June 2003, pp. 3–13.

Revisions in State data (table 11) occurred with the publication of January 2003 data. For information on the revisions for the State data, see the March and May 2003 issues of *Employment and Earnings*, and "Recent changes in the State and Metropolitan Area CES survey," *Monthly Labor Review*, June 2003, pp. 14–19.

Beginning in June 1996, the BLS uses the X-12-ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Fourth-quarter data are published as preliminary in January and February and as final in March.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Current Employment Statistics: (202) 691–6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

Quarterly Census of Employment and Wages

Description of the series

Employment, wage, and establishment data in this section are derived from the quarterly tax reports submitted to State employment security agencies by private and State and local government employers sub-

ject to State unemployment insurance (UI) laws and from Federal, agencies subject to the Unemployment Compensation for Federal Employees (UCFE) program. Each quarter, State agencies edit and process the data and send the information to the Bureau of Labor Statistics.

The Quarterly Census of Employment and Wages (QCEW) data, also referred as ES-202 data, are the most complete enumeration of employment and wage information by industry at the national, State, metropolitan area, and county levels. They have broad economic significance in evaluating labor market trends and major industry developments.

Definitions

In general, the Quarterly Census of Employment and Wages monthly employment data represent the number of **covered workers** who worked during, or received pay for, the pay period that included the 12th day of the month. **Covered private industry employment** includes most corporate officials, executives, supervisory personnel, professionals, clerical workers, wage earners, piece workers, and part-time workers. It excludes proprietors, the unincorporated self-employed, unpaid family members, and certain farm and domestic workers. Certain types of nonprofit employers, such as religious organizations, are given a choice of coverage or exclusion in a number of States. Workers in these organizations are, therefore, reported to a limited degree.

Persons on paid sick leave, paid holiday, paid vacation, and the like, are included. Persons on the payroll of more than one firm during the period are counted by each UI-subject employer if they meet the employment definition noted earlier. The employment count excludes workers who earned no wages during the entire applicable pay period because of work stoppages, temporary layoffs, illness, or unpaid vacations.

Federal employment data are based on reports of monthly employment and quarterly wages submitted each quarter to State agencies for all Federal installations with employees covered by the Unemployment Compensation for Federal Employees (UCFE) program, except for certain national security agencies, which are omitted for security reasons. Employment for all Federal agencies for any given month is based on the number of persons who worked during or received pay for the pay period that included the 12th of the month.

An **establishment** is an economic unit, such as a farm, mine, factory, or store, that produces goods or provides services. It is typically at a single physical location and engaged in one, or predominantly one, type of economic activity for which a single industrial classification may be applied. Occasionally, a single physical location encompasses two or more distinct and significant activities. Each activity should be reported as a separate establishment if separate records are kept and the various activities are classified under different NAICS industries.

Most employers have only one establishment; thus, the establishment is the predominant reporting unit or statistical entity for reporting employment and wages data. Most employers, including State and local governments who operate more than one establishment in a State, file a Multiple Worksite Report each quarter, in addition to their quarterly UI report. The Multiple Worksite Report is used to collect separate employment and wage data for each of the employer's establishments, which are not detailed on the UI report. Some very small multi-establishment employers do not file a Multiple Worksite Report. When the total employment in an employer's secondary establishments (all establishments other than the largest) is 10 or fewer, the employer generally will file a consolidated report for all establishments. Also, some employers either cannot or will not report at the establishment level and thus aggregate establishments into one consolidated unit, or possibly several units, though not at the establishment level.

For the Federal Government, the reporting unit is the **installation**: a single location at which a department, agency, or other government body has civilian employees. Federal agencies follow slightly different criteria than do private employers when breaking down their reports by installation. They are permitted to combine as a single statewide unit: 1) all installations with 10 or fewer workers, and 2) all installations that have a combined total in the State of fewer than 50 workers. Also, when there are fewer than 25 workers in all secondary installations in a State, the secondary installations may be combined and reported with the major installation. Last, if a Federal agency has fewer than five employees in a State, the agency headquarters office (regional office, district office) serving each State may consolidate the employment and wages data for that State with the data reported to the State in which the headquarters is located. As a result of these reporting rules, the number of reporting units is always larger than the number of employers (or government agencies) but smaller than the number of actual establishments (or installations).

Data reported for the first quarter are tabulated into **size** categories ranging from worksites of very small size to those with 1,000 employees or more. The size category is determined by the establishment's March employment level. It is important to note that each establishment of a multi-establishment firm is tabulated separately into the appropriate size category. The total employment level of the reporting multi-establishment firm is not used in the size tabulation.

Covered employers in most States report total **wages** paid during the calendar quarter, regardless of when the services were performed. A few State laws, however, specify that wages be reported for, or based on the period during which services are performed rather than the period during which compensation is paid. Under most State laws or regulations, wages include bonuses, stock options, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans.

Covered employer contributions for old-age, survivors, and disability insurance (OASDI), health insurance, unemployment insurance, workers' compensation, and private pension and welfare funds are not reported as wages. Employee contributions for the same purposes, however, as well as money withheld for income taxes, union dues, and so forth, are reported even though they are deducted from the worker's gross pay.

Wages of covered Federal workers represent the gross amount of all payrolls for all pay periods ending within the quarter. This includes cash allowances, the cash equivalent of any type of remuneration, severance pay, withholding taxes, and retirement deductions. Federal employee remuneration generally covers the same types of services as for workers in private industry.

Average annual wage per employee for any given industry are computed by dividing total annual wages by annual average employment. A further division by 52 yields average weekly wages per employee. Annual pay data only approximate annual earnings because an individual may not be employed by the same employer all year or may work for more than one employer at a time.

Average weekly or annual wage is affected by the ratio of full-time to part-time workers as well as the number of individuals in high-paying and low-paying occupations. When average pay levels between States and industries are compared, these factors should be taken into consideration. For example, industries characterized by high proportions of part-time workers will

show average wage levels appreciably less than the weekly pay levels of regular full-time employees in these industries. The opposite effect characterizes industries with low proportions of part-time workers, or industries that typically schedule heavy weekend and overtime work. Average wage data also may be influenced by work stoppages, labor turnover rates, retroactive payments, seasonal factors, bonus payments, and so on.

Notes on the data

Beginning with the release of data for 2001, publications presenting data from the Covered Employment and Wages program have switched to the 2002 version of the North American Industry Classification System (NAICS) as the basis for the assignment and tabulation of economic data by industry. NAICS is the product of a cooperative effort on the part of the statistical agencies of the United States, Canada, and Mexico. Due to difference in NAICS and Standard Industrial Classification (SIC) structures, industry data for 2001 is not comparable to the SIC-based data for earlier years.

Effective January 2001, the program began assigning Indian Tribal Councils and related establishments to local government ownership. This BLS action was in response to a change in Federal law dealing with the way Indian Tribes are treated under the Federal Unemployment Tax Act. This law requires federally recognized Indian Tribes to be treated similarly to State and local governments. In the past, the Covered Employment and Wage (CEW) program coded Indian Tribal Councils and related establishments in the private sector. As a result of the new law, CEW data reflects significant shifts in employment and wages between the private sector and local government from 2000 to 2001. Data also reflect industry changes. Those accounts previously assigned to civic and social organizations were assigned to tribal governments. There were no required industry changes for related establishments owned by these Tribal Councils. These tribal business establishments continued to be coded according to the economic activity of that entity.

To insure the highest possible quality of data, State employment security agencies verify with employers and update, if necessary, the industry, location, and ownership classification of all establishments on a 3-year cycle. Changes in establishment classification codes resulting from the verification process are introduced with the data reported for the first quarter of the year. Changes resulting from improved employer reporting also are introduced in the first quarter. For these reasons, some data, especially at more detailed geographic levels, may not be strictly comparable with earlier years.

County definitions are assigned according to Federal Information Processing Standards Publications as issued by the National Institute of Standards and Technology. Areas shown as counties include those designated as independent cities in some jurisdictions and, in Alaska, those areas designated by the Census Bureau where counties have not been created. County data also are presented for the New England States for comparative purposes, even though townships are the more common designation used in New England (and New Jersey).

The Office of Management and Budget (OMB) defines metropolitan areas for use in Federal statistical activities and updates these definitions as needed. Data in this table use metropolitan area criteria established by OMB in definitions issued June 30, 1999 (OMB Bulletin No. 99-04). These definitions reflect information obtained from the 1990 Decennial Census and the 1998 U.S. Census Bureau population estimate. A complete list of metropolitan area definitions is available from the National Technical Information Service (NTIS), Document Sales, 5205 Port Royal Road, Springfield, Va. 22161, telephone 1-800-553-6847.

OMB defines metropolitan areas in terms of entire counties, except in the six New England States where they are defined in terms of cities and towns. New England data in this table, however, are based on a county concept defined by OMB as New England County Metropolitan Areas (NECMA) because county-level data are the most detailed available from the Quarterly Census of Employment and Wages. The NECMA is a county-based alternative to the city- and town-based metropolitan areas in New England. The NECMA for a Metropolitan Statistical Area (MSA) include: (1) the county containing the first-named city in that MSA title (this county may include the first-named cities of other MSA, and (2) each additional county having at least half its population in the MSA in which first-named cities are in the county identified in step 1. The NECMA is officially defined areas that are meant to be used by statistical programs that cannot use the regular metropolitan area definitions in New England.

FOR ADDITIONAL INFORMATION on the covered employment and wage data, contact the Division of Administrative Statistics and Labor Turnover at (202) 691–6567.

Job Openings and Labor Turnover Survey

Description of the series

Data for the **Job Openings and Labor Turnover Survey** (JOLTS) are collected and compiled from a sample of 16,000 business establishments. Each month, data are collected for total employment, job openings, hires, quits, layoffs and discharges, and other separations. The JOLTS program covers all private nonfarm establishments such as factories, offices, and stores, as well as Federal, State, and local government entities in the 50 States and the District of Columbia. The JOLTS sample design is a random sample drawn from a universe of more than eight million establishments compiled as part of the operations of the Quarterly Census of Employment and Wages, or QCEW, program. This program includes all employers subject to State unemployment insurance (UI) laws and Federal agencies subject to Unemployment Compensation for Federal Employees (UCFE).

The sampling frame is stratified by ownership, region, industry sector, and size class. Large firms fall into the sample with virtual certainty. JOLTS total employment estimates are controlled to the employment estimates of the Current Employment Statistics (CES) survey. A ratio of CES to JOLTS employment is used to adjust the levels for all other JOLTS data elements. Rates then are computed from the adjusted levels.

The monthly JOLTS data series begin with December 2000. Not seasonally adjusted data on job openings, hires, total separations, quits, layoffs and discharges, and other separations levels and rates are available for the total nonfarm sector, 16 private industry divisions and 2 government divisions based on the North American Industry Classification System (NAICS), and four geographic regions. Seasonally adjusted data on job openings, hires, total separations, and quits levels and rates are available for the total nonfarm sector, selected industry sectors, and four geographic regions.

Definitions

Establishments submit **job openings** information for the last business day of the reference month. A job opening requires that (1) a specific position exists and there is work available for that position; and (2) work could start within 30 days regardless of whether a suitable candidate is found; and (3) the employer is actively recruiting from outside the establishment to fill the position. Included are full-time, part-time, permanent,

short-term, and seasonal openings. Active recruiting means that the establishment is taking steps to fill a position by advertising in newspapers or on the Internet, posting help-wanted signs, accepting applications, or using other similar methods.

Jobs to be filled only by internal transfers, promotions, demotions, or recall from layoffs are excluded. Also excluded are jobs with start dates more than 30 days in the future, jobs for which employees have been hired but have not yet reported for work, and jobs to be filled by employees of temporary help agencies, employee leasing companies, outside contractors, or consultants. The job openings rate is computed by dividing the number of job openings by the sum of employment and job openings, and multiplying that quotient by 100.

Hires are the total number of additions to the payroll occurring at any time during the reference month, including both new and rehired employees and full-time and part-time, permanent, short-term and seasonal employees, employees recalled to the location after a layoff lasting more than 7 days, on-call or intermittent employees who returned to work after having been formally separated, and transfers from other locations. The hires count does not include transfers or promotions within the reporting site, employees returning from strike, employees of temporary help agencies or employee leasing companies, outside contractors, or consultants. The hires rate is computed by dividing the number of hires by employment, and multiplying that quotient by 100.

Separations are the total number of terminations of employment occurring at any time during the reference month, and are reported by type of separation—quits, layoffs and discharges, and other separations. Quits are voluntary separations by employees (except for retirements, which are reported as other separations). Layoffs and discharges are involuntary separations initiated by the employer and include layoffs with no intent to rehire, formal layoffs lasting or expected to last more than 7 days, discharges resulting from mergers, downsizing, or closings, firings or other discharges for cause, terminations of permanent or short-term employees, and terminations of seasonal employees. Other separations include retirements, transfers to other locations, deaths, and separations due to disability. Separations do not include transfers within the same location or employees on strike.

The separations rate is computed by dividing the number of separations by employment, and multiplying that quotient by 100. The quits, layoffs and discharges, and other separations rates are computed similarly, dividing the number by employment and multiplying by 100.

Notes on the data

The JOLTS data series on job openings, hires, and separations are relatively new. The full sample is divided into panels, with one panel enrolled each month. A full complement of panels for the original data series based on the 1987 Standard Industrial Classification (SIC) system was not completely enrolled in the survey until January 2002. The supplemental panels of establishments needed to create NAICS estimates were not completely enrolled until May 2003. The data collected up until those points are from less than a full sample. Therefore, estimates from earlier months should be used with caution, as fewer sampled units were reporting data at that time.

In March 2002, BLS procedures for collecting hires and separations data were revised to address possible underreporting. As a result, JOLTS hires and separations estimates for months prior to March 2002 may not be comparable with estimates for March 2002 and later.

The Federal Government reorganization that involved transferring approximately 180,000 employees to the new Department of Homeland Security is not reflected in the JOLTS hires and separations estimates for the Federal Government. The Office of Personnel Management's record shows these transfers were completed in March 2003. The inclusion of transfers in the JOLTS definitions of hires and separations is intended to cover ongoing movements of workers between establishments. The Department of Homeland Security reorganization was a massive one-time event, and the inclusion of these intergovernmental transfers would distort the Federal Government time series.

Data users should note that seasonal adjustment of the JOLTS series is conducted with fewer data observations than is customary. The historical data, therefore, may be subject to larger than normal revisions. Because the seasonal patterns in economic data series typically emerge over time, the standard use of moving averages as seasonal filters to capture these effects requires longer series than are currently available. As a result, the stable seasonal filter option is used in the seasonal adjustment of the JOLTS data. When calculating seasonal factors, this filter takes an average for each calendar month after detrending the series. The stable seasonal filter assumes that the seasonal factors are fixed; a necessary assumption until sufficient data are available. When the stable seasonal filter is no longer needed, other program features also may be introduced, such as outlier adjustment and extended diagnostic testing. Additionally, it is expected that more series, such as layoffs and discharges and additional industries, may be seasonally adjusted when more data are available.

JOLTS hires and separations estimates cannot be used to exactly explain net changes in payroll employment. Some reasons why it is problematic to compare changes in payroll employment with JOLTS hires and separations, especially on a monthly basis, are: (1) the reference period for payroll employment is the pay period including the 12th of the month, while the reference period for hires and separations is the calendar month; and (2) payroll employment can vary from month to month simply because part-time and on-call workers may not always work during the pay period that includes the 12th of the month. Additionally, research has found that some reporters systematically underreport separations relative to hires due to a number of factors, including the nature of their payroll systems and practices. The shortfall appears to be about 2 percent or less over a 12-month period.

FOR ADDITIONAL INFORMATION on the Job Openings and Labor Turnover Survey, contact the Division of Administrative Statistics and Labor Turnover at (202) 961-5870.

Compensation and Wage Data

(Tables 1–3; 30–36)

Compensation and waged data are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation

costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/nonmetropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (June 1981=100) are available on the Internet:

http://www.bls.gov/ect/

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Office of Compensation Levels and Trends: (202) 691–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 9,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 34 for medium and large private establishments and in table 35 for small private establishments and State and local government.

The survey covers paid leave benefits such as holidays and vacations, and personal, funeral, jury duty, military, family, and sick leave; short-term disability, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid family leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

Notes on the data

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employ-

ees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small private establishments were conducted in even-numbered years, and surveys of medium and large establishments were conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Office of Compensation Levels and Trends on the Internet:

http://www.bls.gov/ebs/

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 36.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Office of Compensation and Working Conditions: (202) 691–6282, or the Internet:

http:/www.bls.gov/cba/

Price Data

(Tables 2; 37–47)

Price data are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—December 2003 = 100 for many Producer Price Indexes (unless otherwise noted), 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993–95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 38. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of homeownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION, contact the Division of Prices and Price Indexes: (202) 691–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the 2002 North American Industry Classification System and product codes developed by the U.S. Census Bureau.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION, contact the Division of Industrial Prices and Price Indexes: (202) 691–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods and services traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification, the three-digit level for the Standard International Trade Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. The trade weights currently used to compute both indexes relate to 2000.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

FOR ADDITIONAL INFORMATION, contact the Division of International Prices: (202) 691–7155.

Productivity Data

(Tables 2; 48–51)

Business and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, nonenergy materials, and purchased business services.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 48–51 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 691–5606.

Industry productivity measures

Description of the series

The BLS industry productivity indexes measure the relationship between output and inputs for selected industries and industry groups, and thus reflect trends in industry efficiency over time. Industry measures include labor productivity, multifactor productivity, compensation, and unit labor costs.

The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per hour is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series is based on the hours of all workers or, in the case of some transportation industries, on the number of employees. For most industries, the series consists of the hours of all employees. For some trade and services industries, the series also includes the hours of partners, proprietors, and unpaid family workers.

Unit labor costs represent the labor compensation costs per unit of output produced, and are derived by dividing an index of labor compensation by an index of output. **Labor compensation** includes payroll as well as supplemental payments, including both legally required expenditures and payments for voluntary programs.

Multifactor productivity is derived by dividing an index of industry output by an index of combined inputs consumed in producing that output. **Combined inputs** include capital, labor, and intermediate purchases. The measure of **capital input** represents the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories. The measure of **intermediate purchases** is a combination of purchased materials, services, fuels, and electricity.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics and the Census Bureau, with additional data supplied by other government agencies, trade associations, and other sources.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691–5618.

International Comparisons

(Tables 52–54)

Labor force and unemployment

Description of the series

Tables 52 and 53 present comparative measures of the labor force, employment, and unemployment approximating U.S. concepts for the United States, Canada, Australia, Japan, and six European countries. The labor force statistics published by other industrial countries are not, in most cases, comparable to U.S. concepts. Therefore, the Bureau adjusts the figures for selected countries, for all known major definitional differences, to the extent that data to prepare adjustments are available. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country. For further information on adjustments and comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" *Monthly Labor Review*, June 2000, pp. 3–20 (available on the BLS Web site at **http://www.bls.gov/opub/mlr/2000/06/art1full.pdf**).

Definitions

For the principal U.S. definitions of the labor force, employment, and unemployment, see the Notes section on Employment and

Unemployment Data: Household survey data.

Notes on the data

The foreign country data are adjusted as closely as possible to U.S. concepts, with the exception of lower age limits and the treatment of layoffs. These adjustments include, but are not limited to: including older persons in the labor force by imposing no upper age limit, adding unemployed students to the unemployed, excluding the military and family workers working fewer than 15 hours from the employed, and excluding persons engaged in passive job search from the unemployed.

Data for the United States relate to the population 16 years of age and older. The U.S. concept of the working age population has no upper age limit. The adjusted to U.S. concepts statistics have been adapted, insofar as possible, to the age at which compulsory schooling ends in each country, and the Swedish statistics have been adjusted to include persons older than the Swedish upper age limit of 64 years. The adjusted statistics presented here relate to the population 16 years of age and older in France, Sweden, and the United Kingdom; 15 years of age and older in Australia, Japan, Germany, Italy, and the Netherlands. An exception to this rule is that the Canadian statistics are adjusted to cover the population 16 years of age and older, whereas the age at which compulsory schooling ends remains at 15 years. In the labor force participation rates and employment-population ratios, the denominator is the civilian noninstitutionalized working age population, except that the institutionalized working age population is included in Japan and Germany.

In the United States, the unemployed include persons who are not employed and who were actively seeking work during the reference period, as well as persons on layoff. Persons waiting to start a new job who were actively seeking work during the reference period are counted as unemployed under U.S. concepts; if they were not actively seeking work, they are not counted in the labor force. In some countries, persons on layoff are classified as employed due to their strong job attachment. No adjustment is made for the countries that classify those on layoff as employed. In the United States, as in Australia and Japan, passive job seekers are not in the labor force; job search must be active, such as placing or answering advertisements, contacting employers directly,or registering with an employment agency (simply reading ads is not enough to qualify as active search). Canada and the European countries classify passive jobseekers as unemployed. An adjustment is made to exclude them in Canada, but not in the European countries where the phenomenon is less prevalent. Persons waiting to start a new job are counted among the unemployed for all other countries, whether or not they were actively seeking work.

The figures for one or more recent years for France, Germany, and the Netherlands are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent year measures for these countries are therefore subject to revision whenever more current labor force surveys become available.

There are breaks in series for the United States (1994, 1997, 1998, 1999, 2000, 2003), Australia (2001), and Germany (1999).

For the United States, beginning in 1994, data are not strictly comparable for prior years because of the introduction of a major redesign of the labor force survey questionnaire and collection methodology. The redesign effect has been estimated to increase the overall unemployment rate by 0.1 percentage point. Other breaks noted relate to changes in population controls that had virtually no effect on unemployment rates.

For a description of all the changes in the U.S. labor force survey over time and their impact, see Historical Comparability in the "Household Data" section of the BLS publication *Employment and Earnings* (available on the BLS Web site at **http://www.bls.gov/cps/eetech_methods.pdf**).

For Australia, the 2001 break reflects the introduction in April 2001 of a redesigned labor force survey that allowed for a closer application of International Labor Office guidelines for the definitions of labor force statistics. The Australian Bureau of Statistics revised their data so there is no break in the employment series. However, the reclassification of persons who had not actively looked for work because they were waiting to begin a new job from "not in the labor force" to "unemployed" could only be incorporated for April 2001 forward. This reclassification diverges from the U.S. definition where persons waiting to start a new job but not actively seeking work are not counted in the labor force. The impact of the reclassification was an increase in the unemployment rate by 0.1 percentage point in 2001.

For Germany, the 1999 break reflects the incorporation of an improved method of data calculation and a change in coverage to persons living in private households only.

For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries*, on the BLS Web site at **http://www.bls.gov/fls/flslforc.pdf**

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691-5654 or **flshelp@bls.gov**

Manufacturing productivity and labor costs

Description of the series

Table 54 presents comparative indexes of manufacturing labor productivity (output per hour), output, total hours, compensation per hour, and unit labor costs for the United States, Canada, Japan, and nine European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. There are greater technical problems in comparing the levels of manufacturing output among countries.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) in the United States, Canada, Japan, France, Germany, Norway, and Sweden, and to all employees (wage and salary earners) in the other countries.

Definitions

Output, in general, refers to value added in manufacturing from the national accounts of each country. However, the output series for Japan prior to 1970 is an index of industrial production, and the national accounts measures for the United Kingdom are essentially identical to their indexes of industrial production.

The 1977–97 output data for the United States are the gross product originating (value added) measures prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Comparable manufacturing output data currently are not available prior to 1977.

U.S. gross product originating is a chain-type annual-weighted series. (For more information on the U.S. measure, see Robert E. Yuskavage, "Improved Estimates of Gross Product by Industry, 1959–94," *Survey of Current Business*, August 1996, pp. 133–55.) The Japanese value added series is based upon one set of fixed price weights for the years 1970 through 1997. Output series for the other foreign economies also employ fixed price weights, but the weights are updated periodically (for example, every 5 or 10 years).

To preserve the comparability of the U.S. measures with those for other economies, BLS uses gross product originating in manufacturing for the United States for these comparative measures. The gross product originating series differs from the manufacturing output series that BLS publishes in its news releases on quarterly measures of U.S. productivity and costs (and that underlies the measures that appear in tables 48 and 50 in this section). The quarterly measures are on a "sectoral output" basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

Total labor hours refers to hours worked in all countries. The measures are developed from statistics of manufacturing employment and average hours. The series used for France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked. For Germany, BLS uses estimates of average hours worked developed by a research institute connected to the Ministry of Labor for use with the national accounts employment figures. For the other countries, BLS constructs its own estimates of average hours.

An hours series is not available for Denmark after 1993; therefore, the BLS measure of labor input for Denmark ends in 1993.

Total compensation (labor cost) includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. The measures are from the national accounts of each country, except those for Belgium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. For Canada, France, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed-persons measures by assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France (for all years) and Italy (beginning in 1970) refer to mining and manufacturing less energy-related products, and the measures for Denmark include mining and exclude manufacturing handicrafts from 1960 to 1966.

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691–5654.

Occupational Injury and Illness Data

(Tables 55–56)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent ill-

nesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691–6180, or access the Internet at:

http://www.bls.gov/iif/

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691–6175, or the Internet at:

http://www.bls.gov/iif/

1. Labor market indicators

Selected indicators	2002	2003	2002			2003				2004	
			II	III	IV	I	II	III	IV	I	II
Employment data											
Employment status of the civilian noninstitutional population (household survey):[1]											
Labor force participation rate	66.6	66.2	66.7	66.6	66.5	66.3	66.4	66.2	66.1	66.0	65.9
Employment-population ratio	62.7	62.3	62.8	62.8	62.5	62.4	62.3	62.1	62.3	62.2	62.2
Unemployment rate	5.8	6.0	5.9	5.8	5.9	5.8	6.1	6.1	5.9	5.6	5.6
Men	5.9	6.3	6.0	5.9	6.1	6.1	6.5	6.4	6.1	5.7	5.7
16 to 24 years	12.8	13.4	12.8	13.1	12.5	12.6	14.0	13.8	13.1	12.5	12.9
25 years and older	4.7	5.0	4.8	4.7	4.9	5.0	5.2	5.1	4.9	4.5	4.5
Women	5.6	5.7	5.7	5.6	5.7	5.5	5.7	5.8	5.6	5.6	5.4
16 to 24 years	11.1	11.4	11.2	10.9	11.4	11.2	11.8	11.5	10.9	11.1	10.9
25 years and older	4.6	4.6	4.8	4.6	4.6	4.5	4.6	4.7	4.6	4.5	4.4
Employment, nonfarm (payroll data), in thousands:[1]											
Total nonfarm	130,341	129,932	130,389	130,287	130,248	130,047	129,878	129,820	130,002	130,367	131,148
Total private	108,828	108,356	108,895	108,736	108,654	108,428	108,309	108,260	108,453	108,827	109,596
Goods-producing	22,557	21,817	22,638	22,466	22,252	22,025	21,848	21,718	21,676	21,719	21,863
Manufacturing	15,259	14,524	15,347	15,197	14,979	14,775	14,570	14,410	14,340	14,326	14,377
Service-providing	107,789	108,115	107,751	107,821	107,995	108,022	108,030	108,102	108,326	108,648	109,285
Average hours:											
Total private	33.9	33.7	33.9	33.9	33.8	33.8	33.7	33.6	33.7	33.8	33.7
Manufacturing	40.5	40.4	40.6	40.4	40.4	40.4	40.2	40.2	40.6	41.0	40.9
Overtime	4.2	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.4	4.6	4.6
Employment Cost Index[2]											
Percent change in the ECI, compensation:											
All workers (excluding farm, household and Federal workers)	3.4	3.8	.9	.9	.6	1.4	.8	1.1	.5	1.4	.9
Private industry workers	3.2	4.0	1.1	.6	.4	1.7	.8	1.0	.4	1.5	.9
Goods-producing[3]	3.7	4.0	.9	.6	.9	1.8	.9	.7	.5	2.3	.9
Service-providing[3]	3.1	4.0	1.2	.6	.2	1.5	.8	1.1	.5	1.1	1.0
State and local government workers	4.1	3.3	.4	2.2	.9	.7	.4	1.7	.5	.7	.4
Workers by bargaining status (private industry):											
Union	4.2	4.6	1.0	1.2	.9	1.6	1.2	1.0	.7	2.8	1.5
Nonunion	3.2	3.9	1.1	.5	.4	1.6	.8	1.0	.4	1.3	.8

[1] Quarterly data seasonally adjusted.

[2] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

[3] Goods-producing industries include mining, construction, and manufacturing. Service-providing industries include all other private sector industries.

NOTE: Beginning in January 2003, household survey data reflect revised population controls. Nonfarm data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	2002	2003	2002			2003				2004	
			II	III	IV	I	II	III	IV	I	II
Compensation data[1,2]											
Employment Cost Index—compensation (wages, salaries, benefits):											
Civilian nonfarm	3.4	3.8	0.9	0.9	0.6	1.4	0.8	1.1	0.5	1.4	0.9
Private nonfarm	3.2	4.0	1.1	.6	.4	1.7	.8	1.0	.4	1.5	.9
Employment Cost Index—wages and salaries:											
Civilian nonfarm	2.9	2.9	.8	.7	.4	1.0	.6	.9	.3	.6	.6
Private nonfarm	2.7	3.0	1.0	.4	.3	1.1	.7	.8	.4	.7	.7
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	2.3	2.3	.5	.6	-.1	1.8	−.3	−.2	−.2	1.2	1.2
Producer Price Index:											
Finished goods	3.2	3.2	.2	.2	-.1	3.7	−.8	.3	.0	1.2	1.2
Finished consumer goods	4.2	4.2	.4	.0	-.3	2.4	1.8	.3	.0	1.5	1.4
Capital equipment	.4	.4	−.3	−.7	.6	.6	−.6	−.1	.0	.6	.5
Intermediate materials, supplies, and components	4.6	4.6	1.1	1.1	.1	6.5	−2.1	−.1	.0	2.5	3.0
Crude materials	25.2	25.2	37.1	1.9	6.5	28.0	−10.6	3.4	14.4	6.0	7.6
Productivity data[3]											
Output per hour of all persons:											
Business sector	4.3	4.5	1.7	4.8	1.2	3.9	7.6	8.5	2.4	3.9	1.5
Nonfarm business sector	4.4	4.4	1.1	4.5	1.6	3.7	6.7	9.0	3.1	3.7	2.5
Nonfinancial corporations[4]	4.4	5.4	4.9	4.1	3.4	3.2	9.1	9.4	5.0	.2	1.4

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[4] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly change					Four quarters ending—				
	2003			2004		2003			2004	
	II	III	IV	I	II	II	III	IV	I	II
Average hourly compensation:[1]										
All persons, business sector	6.1	5.6	4.0	2.8	3.7	3.6	4.6	5.3	4.6	4.0
All persons, nonfarm business sector	5.7	6.1	4.4	2.0	4.3	3.4	4.6	5.4	4.5	4.2
Employment Cost Index—compensation:										
Civilian nonfarm[2]	.8	1.1	.5	1.4	.9	3.7	3.9	3.8	3.8	3.9
Private nonfarm	.8	1.0	.4	1.5	.9	3.5	4.0	4.0	3.9	4.0
Union	1.2	1.0	.7	2.8	1.5	5.0	4.8	4.6	5.7	6.0
Nonunion	.8	1.0	.4	1.3	.8	3.3	3.8	3.9	3.6	3.5
State and local governments	.4	1.7	.5	.7	.4	4.1	3.6	3.3	3.3	3.4
Employment Cost Index—wages and salaries:										
Civilian nonfarm[2]	.6	.9	.3	.6	.5	2.7	2.9	2.9	2.5	2.5
Private nonfarm	.7	.8	.4	.7	.7	2.6	3.0	3.0	2.6	2.6
Union	.7	.6	.6	.6	1.0	3.0	2.6	2.4	2.5	2.9
Nonunion	.7	.9	.2	.7	.6	2.5	3.1	3.1	2.6	2.5
State and local governments	.3	1.0	.4	.4	.2	3.1	2.3	2.1	2.1	1.9

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] Excludes Federal and household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL															
Civilian noninstitutional population[1]	217,570	221,168	221,507	221,779	222,039	222,279	222,509	222,161	222,357	222,550	222,757	222,967	223,196	223,422	223,677
Civilian labor force	144,863	146,510	146,622	146,610	146,892	147,187	146,878	146,863	146,471	146,650	146,741	146,974	147,279	147,856	147,704
Participation rate	66.6	66.2	66.2	66.1	66.2	66.2	66.0	66.1	65.9	65.9	65.9	65.9	66.0	66.2	66.0
Employed	136,485	137,736	137,693	137,644	138,095	138,533	138,479	138,566	138,301	138,298	138,576	138,772	139,031	139,660	139,681
Employment-population ratio[2]	62.7	62.3	62.2	62.1	62.2	62.3	62.2	62.4	62.2	62.1	62.2	62.2	62.3	62.5	62.4
Unemployed	8,378	8,774	8,929	8,966	8,797	8,653	8,398	8,297	8,170	8,352	8,164	8,203	8,248	8,196	8,022
Unemployment rate	5.8	6.0	6.1	6.1	6.0	5.9	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.5	5.4
Not in the labor force	72,707	74,658	74,884	75,168	75,147	75,093	75,631	75,298	75,886	75,900	76,016	75,993	75,916	75,565	75,973
Men, 20 years and over															
Civilian noninstitutional population[1]	96,439	98,272	98,434	98,568	98,696	98,814	98,927	98,866	98,966	99,065	99,170	99,279	99,396	99,512	99,642
Civilian labor force	73,630	74,623	74,682	74,905	74,942	75,188	75,044	75,171	74,797	75,018	74,871	75,048	75,372	75,577	75,639
Participation rate	76.3	75.9	75.9	76.0	75.9	76.1	75.9	76.0	75.6	75.7	75.5	75.6	75.8	75.9	75.9
Employed	69,734	70,415	70,324	70,596	70,726	70,964	71,099	71,329	70,969	71,128	71,118	71,162	71,570	71,847	71,870
Employment-population ratio[2]	72.3	71.7	71.4	71.6	71.7	71.8	71.9	72.1	71.7	71.8	71.7	71.7	72.0	72.2	72.1
Unemployed	3,896	4,209	4,358	4,309	4,216	4,224	3,945	3,842	3,828	3,890	3,753	3,886	3,802	3,730	3,768
Unemployment rate	5.3	5.6	5.8	5.8	5.6	5.6	5.3	5.1	5.1	5.2	5.0	5.2	5.0	4.9	5.0
Not in the labor force	22,809	23,649	23,751	23,663	23,754	23,620	23,882	23,694	24,168	24,047	24,299	24,231	24,023	23,935	24,003
Women, 20 years and over															
Civilian noninstitutional population[1]	105,136	106,800	106,957	107,080	107,197	107,303	107,404	107,131	107,216	107,299	107,389	107,483	107,586	107,687	107,801
Civilian labor force	63,648	64,716	64,836	64,608	64,899	64,917	64,846	64,515	64,629	64,687	64,785	64,813	64,893	65,122	64,903
Participation rate	60.5	60.6	60.6	60.3	60.5	60.5	60.4	60.2	60.3	60.3	60.3	60.3	60.3	60.5	60.2
Employed	60,420	61,402	61,467	61,191	61,524	61,597	61,521	61,260	61,456	61,373	61,571	61,721	61,629	61,918	61,870
Employment-population ratio[2]	57.5	57.5	57.5	57.1	57.4	57.4	57.3	57.2	57.3	57.2	57.3	57.4	57.3	57.5	57.4
Unemployed	3,228	3,314	3,369	3,417	3,375	3,320	3,326	3,255	3,172	3,314	3,215	3,092	3,264	3,204	3,033
Unemployment rate	5.1	5.1	5.2	5.3	5.2	5.1	5.1	5.0	4.9	5.1	5.0	4.8	5.0	4.9	4.7
Not in the labor force	41,488	42,083	42,121	42,472	42,299	42,387	42,558	42,617	42,587	42,613	42,604	42,670	42,693	42,565	42,898
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	15,994	16,096	16,116	16,131	16,145	16,162	16,178	16,164	16,175	16,186	16,198	16,205	16,214	16,222	16,234
Civilian labor force	7,585	7,170	7,104	7,097	7,051	7,082	6,987	7,177	7,045	6,945	7,085	7,113	7,014	7,157	7,162
Participation rate	47.4	44.5	44.1	44.0	43.7	43.8	43.2	44.4	43.6	42.9	43.7	43.9	43.3	44.1	44.1
Employed	6,332	5,919	5,902	5,857	5,846	5,972	5,859	5,977	5,875	5,797	5,888	5,888	5,832	5,896	5,941
Employment-population ratio[2]	39.6	36.8	36.6	36.3	36.2	37.0	36.2	37.0	36.3	35.8	36.3	36.3	36.0	36.3	36.6
Unemployed	1,253	1,251	1,202	1,240	1,205	1,109	1,128	1,200	1,170	1,148	1,197	1,225	1,181	1,262	1,220
Unemployment rate	16.5	17.5	16.9	17.5	17.1	15.7	16.1	16.7	16.6	16.5	16.9	17.2	16.8	17.6	17.0
Not in the labor force	8,409	8,926	9,012	9,034	9,094	9,080	9,191	8,987	9,130	9,240	9,113	9,092	9,200	9,065	9,072
White[3]															
Civilian noninstitutional population[1]	179,783	181,292	181,512	181,696	181,871	182,032	182,185	181,879	182,001	182,001	182,252	182,384	182,531	182,676	182,846
Civilian labor force	120,150	120,546	120,658	120,411	120,736	121,041	120,751	120,723	120,540	120,542	120,675	120,984	121,180	121,428	121,300
Participation rate	66.8	66.5	66.5	66.3	66.4	66.5	66.3	66.4	66.2	66.2	66.2	66.3	66.4	66.5	66.3
Employed	114,013	114,235	114,156	114,015	114,535	114,783	114,678	114,765	114,602	114,433	114,712	114,976	115,152	115,623	115,547
Employment-population ratio[2]	63.4	63.0	62.9	62.8	63.0	63.1	62.9	63.1	63.0	62.8	62.9	63.0	63.1	63.3	63.2
Unemployed	6,137	6,311	6,502	6,397	6,200	6,258	6,073	5,958	5,938	6,109	5,963	6,008	6,028	5,805	5,753
Unemployment rate	5.1	5.2	5.4	5.3	5.1	5.2	5.0	4.9	4.9	5.1	4.9	5.0	5.0	4.8	4.7
Not in the labor force	59,633	60,746	60,854	61,285	61,135	60,991	61,434	61,156	61,460	61,579	61,577	61,400	61,351	61,248	61,546
Black or African American[3]															
Civilian noninstitutional population[1]	25,578	25,686	25,742	25,784	25,825	25,860	25,894	25,867	25,900	25,932	25,967	26,002	26,040	26,078	26,120
Civilian labor force	16,565	16,526	16,585	166,677	16,589	16,524	16,365	16,602	16,404	16,595	16,485	16,442	16,506	16,755	16,724
Participation rate	64.8	64.3	64.4	64.7	64.2	63.9	63.2	64.2	63.3	64.0	63.5	63.2	63.4	64.3	64.0
Employed	14,872	14,739	14,771	14,826	14,696	14,812	14,679	14,886	14,804	14,909	14,878	14,818	14,833	14,926	14,983
Employment-population ratio[2]	58.1	57.4	57.4	57.5	56.9	57.3	56.7	57.5	57.2	57.2	57.3	57.0	57.0	57.2	57.4
Unemployed	1,693	1,787	1,813	1,851	1,893	1,712	1,686	1,736	1,600	1,686	1,607	1,624	1,673	1,829	1,741
Unemployment rate	10.2	10.8	10.9	11.1	11.4	10.4	10.3	10.5	9.8	10.2	9.7	9.9	10.1	10.9	10.4
Not in the labor force	9,013	9,161	9,127	9,107	9,236	9,336	9,529	9,265	9,495	9,337	9,482	9,560	9,534	9,323	9,396

See footnotes at end of table.

4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		2003					2004						
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Hispanic or Latino ethnicity															
Civilian noninstitutional population[1]	25,963	27,551	27,701	27,808	27,913	28,016	28,116	27,619	27,705	27,791	27,879	27,968	28,059	28,150	28,243
Civilian labor force	17,943	18,813	18,843	18,877	18,940	19,125	19,035	18,811	18,693	19,010	19,064	19,313	19,304	19,450	19,482
Participation rate	69.1	68.3	68.0	67.9	67.9	68.3	67.7	68.1	67.5	68.4	68.4	69.1	68.8	69.1	69.0
Employed	16,590	17,372	173 83	17,456	17,556	17,709	17,784	17,441	17,303	17,596	17,693	17,958	18,019	18,118	18,144
Employment-population ratio[2]	63.9	63.1	62.8	62.8	62.9	63.2	63.3	63.2	62.5	63.3	63.5	64.2	64.2	64.4	64.2
Unemployed	1,353	1,441	1,460	1,421	1,383	1,416	1,250	1,370	1,389	1,414	1,371	1,355	1,285	1,332	1,338
Unemployment rate	7.5	7.7	7.8	7.5	7.3	7.4	6.6	7.3	7.4	7.4	7.2	7.0	6.7	6.8	6.9
Not in the labor force	8,020	8,738	8,858	8,931	8,974	8,891	9,082	8,807	9,012	8,781	8,815	8,654	8,755	8,700	8,761

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

[3] Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

NOTE: Estimates for the above race groups (white and black or African American) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Beginning in January 2003, data reflect revised population controls used in the household survey.

5. Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Characteristic															
Employed, 16 years and over	136,845	137,736	137,693	137,644	138,095	138,533	138,479	138,566	138,301	138,298	138,576	138,772	139,031	139,660	139,681
Men	72,903	73,332	73,263	73,488	73,643	73,915	74,085	74,343	73,901	74,006	74,053	74,035	74,476	74,822	74,860
Women	63,582	64,404	64,431	64,155	64,452	64,618	64,394	64,223	64,400	64,292	64,523	64,737	64,555	64,838	64,822
Married men, spouse present	44,116	44,653	44,659	44,566	44,684	45,152	45,431	45,490	45,128	45,043	44,735	44,723	44,938	44,935	45,106
Married women, spouse present	34,155	34,695	34,684	34,612	34,993	35,076	35,034	34,585	34,502	34,256	34,339	34,522	34,461	34,599	34,448
Persons at work part time[1]															
All industries:															
Part time for economic reasons	4,213	4,701	4,498	4,896	4,800	4,880	4,788	4,714	4,437	4,733	4,574	4,665	4,513	4,490	4,504
Slack work or business conditions	2,788	3,118	3,063	3,185	3,030	3,226	3,205	2,996	2,865	3,011	2,819	2,853	2,803	2,660	2,812
Could only find part-time work	1,124	1,279	1,201	1,334	1,356	1,350	1,295	1,380	1,347	1,427	1,439	1,467	1,404	1,500	1,461
Part time for noneconomic reasons	18,843	19,014	19,482	19,021	18,935	19,110	18,561	18,905	18,900	19,006	19,000	19,621	19,531	19,741	19,680
Nonagricultural industries:															
Part time for economic reasons	4,119	4,596	4,404	4,794	4,690	4,782	4,727	4,613	4,328	4,622	4,471	4,605	4,442	4,400	4,391
Slack work or business conditions	2,726	3,052	2,989	3,127	2,964	3,153	3,144	2,911	2,778	2,927	2,756	2,812	2,762	2,605	2,714
Could only find part-time work	1,114	1,264	1,191	1,335	1,349	1,353	1,279	1,399	1,340	1,414	1,431	1,476	1,387	1,496	1,442
Part time for noneconomic reasons	18,487	18,658	19,016	18,633	18,628	18,752	18,367	18,636	18,691	18,693	18,664	19,220	19,072	19,290	19,213

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Characteristic															
Total, 16 years and older	5.8	6.0	6.1	6.1	6.0	5.9	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.5	5.4
Both sexes, 16 to 19 years	16.5	17.5	16.9	17.5	17.1	15.7	16.1	16.7	16.6	16.5	16.9	17.2	16.8	17.6	17.0
Men, 20 years and older	5.3	5.6	5.8	5.8	5.6	5.6	5.3	5.3	5.1	5.2	5.0	5.2	5.0	4.9	5.0
Women, 20 years and older	5.1	5.1	5.2	5.3	5.2	5.1	5.1	5.0	4.9	5.1	5.0	4.8	5.0	4.9	4.7
White, total[1]	5.1	5.2	5.4	5.3	5.1	5.2	5.0	4.9	4.9	5.1	4.9	5.0	5.0	4.8	4.7
Both sexes, 16 to 19 years	14.5	15.2	15.1	15.1	14.3	14.3	14.8	14.1	15.2	14.8	15.7	15.7	14.8	14.9	15.3
Men, 16 to 19 years	15.9	17.1	16.5	17.6	15.9	16.8	16.3	14.0	15.5	16.2	17.9	18.6	16.4	15.5	15.8
Women, 16 to 19 years	13.1	13.3	13.7	12.6	12.6	11.5	13.1	14.2	14.9	13.3	13.3	12.7	13.2	14.3	14.8
Men, 20 years and older	4.7	5.0	5.3	5.0	4.9	5.0	4.7	4.5	4.5	4.7	4.5	4.7	4.5	4.3	4.4
Women, 20 years and older	4.4	4.4	4.4	4.5	4.4	4.4	4.3	4.4	4.2	4.4	4.2	4.1	4.4	4.2	4.0
Black or African American, total[1]	10.2	10.8	10.9	11.1	11.4	10.4	10.3	10.5	9.8	10.2	9.7	9.9	10.1	10.9	10.4
Both sexes, 16 to 19 years	29.8	33.0	29.8	32.7	37.3	28.9	27.3	32.5	25.1	29.4	28.3	32.5	32.6	37.0	28.9
Men, 16 to 19 years	31.3	36.0	27.8	34.2	40.9	32.5	28.4	42.1	29.6	36.6	30.9	30.3	33.9	37.8	33.9
Women, 16 to 19 years	28.3	30.3	31.5	31.4	33.2	25.7	26.5	25.8	21.9	22.8	26.1	34.1	31.4	36.3	24.1
Men, 20 years and older	9.5	10.3	10.5	11.0	10.5	10.1	9.3	9.6	9.4	9.2	9.3	9.3	9.3	10.3	10.4
Women, 20 years and older	8.8	9.2	9.7	9.2	9.8	9.1	9.7	9.1	8.8	9.3	8.7	8.4	8.9	9.1	8.7
Hispanic or Latino ethnicity	7.5	7.7	7.8	7.5	7.3	7.4	6.6	7.3	7.4	7.4	7.2	7.0	6.7	6.8	6.9
Married men, spouse present	3.6	3.8	3.9	3.8	3.8	3.7	3.3	3.3	3.4	3.2	3.1	3.1	3.2	3.2	3.1
Married women, spouse present	3.7	3.7	3.9	3.9	3.8	3.8	3.9	3.7	3.6	3.7	3.7	3.3	3.7	3.5	3.5
Full-time workers	5.9	6.1	6.2	6.2	6.1	6.1	5.8	5.7	5.6	5.8	5.6	5.7	5.6	5.6	5.5
Part-time workers	5.2	5.5	5.3	5.7	5.5	5.1	5.3	5.4	5.2	5.4	5.3	5.2	5.5	5.2	5.2
Educational attainment[2]															
Less than a high school diploma	8.4	8.8	9.3	8.7	8.8	8.5	8.1	8.8	8.5	8.8	8.7	8.8	8.8	8.3	8.1
High school graduates, no college[3]	5.3	5.5	5.4	5.4	5.5	5.4	5.5	4.9	5.0	5.3	5.2	5.0	5.1	5.1	4.9
Some college or associate degree	4.5	4.8	4.7	4.8	4.8	4.8	4.5	4.5	4.4	4.7	4.1	4.0	4.2	4.2	4.0
Bachelor's degree and higher[4]	2.9	3.1	3.1	3.2	3.1	3.1	3.0	2.9	2.9	2.9	2.9	2.9	2.7	2.7	2.7

[1] Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

[2] Data refer to persons 25 years and older.

[3] Includes high school diploma or equivalent.

[4] Includes persons with bachelor's, master's, professional, and doctoral degrees.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Less than 5 weeks	2,893	2,785	2,735	2,749	2,733	2,622	2,627	2,612	2,468	2,589	2,792	2,707	2,688	2,805	2,604
5 to 14 weeks	2,580	2,612	2,630	2,736	2,585	2,556	2,450	2,394	2,412	2,414	2,369	2,376	2,405	2,476	2,521
15 weeks and over	2,904	3,378	3,561	3,511	3,478	3,484	3,403	3,365	3,274	3,320	2,969	3,077	3,065	2,878	2,903
15 to 26 weeks	1,369	1,442	1,561	1,438	1,460	1,448	1,513	1,467	1,403	1,332	1,170	1,288	1,306	1,211	1,239
27 weeks and over	1,535	1,936	2,001	2,073	2,018	2,036	1,890	1,898	1,871	1,988	1,800	1,789	1,759	1,667	1,664
Mean duration, in weeks	16.6	19.2	19.2	19.6	19.4	20.0	19.6	19.8	20.3	20.1	19.7	20.0	19.9	18.6	19.0
Median duration, in weeks	9.1	10.1	10.0	10.1	10.3	10.4	10.4	10.7	10.3	10.3	9.5	10.0	10.8	8.9	9.4

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Job losers[1]	4,607	4,838	4,939	4,947	4,877	4,719	4,618	4,382	4,323	4,607	4,399	4,211	4,099	4,181	3,936
On temporary layoff	1,124	1,121	1,092	1,110	1,097	1,055	1,060	1,028	1,064	1,040	994	926	1,011	1,065	982
Not on temporary layoff	3,483	3,717	3,847	3,837	3,780	3,664	3,558	3,353	3,258	3,567	3,405	3,286	3,088	3,116	2,955
Job leavers	866	818	790	836	789	931	783	804	827	836	822	846	902	895	884
Reentrants	2,368	2,477	2,530	2,436	2,518	2,440	2,366	2,509	2,424	2,424	2,314	2,438	2,435	2,330	2,447
New entrants	536	641	650	684	653	619	694	681	676	627	645	713	636	680	694
Percent of unemployed															
Job losers[1]	55.0	55.1	55.4	55.6	55.2	54.2	54.6	52.3	52.4	54.2	53.8	51.3	50.8	51.7	49.4
On temporary layoff	13.4	12.8	12.3	12.5	12.4	12.1	12.5	12.3	12.9	12.2	12.1	11.3	12.5	13.2	12.3
Not on temporary layoff	41.6	42.4	43.2	43.1	42.8	42.1	42.0	40.0	39.8	42.0	41.6	40.0	38.3	38.5	37.1
Job leavers	10.3	9.3	8.9	9.4	8.9	10.7	9.3	9.6	10.0	9.8	10.1	10.3	11.2	11.1	11.1
Reentrants	28.3	28.2	28.4	27.4	28.5	28.0	28.0	30.0	29.4	28.5	28.3	29.7	30.2	28.8	30.7
New entrants	6.4	7.3	7.3	7.7	7.4	7.1	8.2	8.1	8.2	7.4	7.9	8.7	7.9	8.4	8.7
Percent of civilian labor force															
Job losers[1]	3.2	3.3	3.4	3.4	3.3	3.2	3.1	3.0	3.0	3.1	3.0	2.9	2.8	2.8	2.7
Job leavers	.6	.6	.5	.6	.5	.6	.5	.5	.6	.6	.6	.6	.6	.6	.6
Reentrants	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.6	1.7	1.7	1.6	1.7
New entrants	.4	.4	.4	.5	.4	.4	.5	.5	.5	.4	.4	.5	.4	.5	.5

[1] Includes persons who completed temporary jobs.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and older	5.8	6.0	6.1	6.1	6.0	5.9	5.7	5.6	5.6	5.7	5.6	5.6	5.6	5.5	5.4
16 to 24 years	12.0	12.4	12.4	12.8	12.3	12.1	11.7	12.0	11.8	11.8	11.6	12.1	12.0	12.0	11.6
16 to 19 years	16.5	17.5	16.9	17.5	17.1	15.7	16.1	16.7	16.6	16.5	16.9	17.2	16.8	17.6	17.0
16 to 17 years	18.8	19.1	18.8	19.3	20.2	17.5	18.3	18.2	17.6	19.4	20.2	21.6	20.6	20.2	20.8
18 to 19 years	15.1	16.4	15.7	16.2	15.2	14.7	14.7	15.7	15.7	14.5	14.7	14.7	14.3	16.1	14.9
20 to 24 years	9.7	10.0	10.2	10.6	10.1	10.4	9.6	9.8	9.5	9.6	9.2	9.7	9.8	9.3	9.0
25 years and older	4.6	4.8	5.0	4.9	4.9	4.8	4.7	4.5	4.5	4.6	4.5	4.4	4.5	4.4	4.3
25 to 54 years	4.8	5.0	5.1	5.1	5.1	5.0	4.9	4.7	4.7	4.9	4.6	4.5	4.5	4.6	4.5
55 years and older	3.8	4.1	4.1	4.0	3.8	3.9	3.9	3.7	3.8	3.8	3.8	3.9	3.9	3.7	3.7
Men, 16 years and older	5.9	6.3	6.4	6.4	6.2	6.2	5.8	5.7	5.7	5.8	5.7	5.8	5.6	5.5	5.6
16 to 24 years	12.8	13.4	12.9	14.1	13.2	13.4	12.6	12.7	12.2	12.6	12.8	13.0	12.8	12.2	12.4
16 to 19 years	18.1	19.3	17.6	19.6	18.7	18.3	17.4	17.5	17.2	18.3	19.1	19.1	18.1	17.7	18.0
16 to 17 years	21.1	20.7	20.6	22.1	20.4	18.3	18.4	19.3	19.4	22.3	23.4	23.3	22.8	21.2	21.9
18 to 19 years	16.4	18.4	15.6	18.2	17.9	18.1	16.9	16.2	15.7	15.8	16.5	16.6	15.8	15.7	16.0
20 to 24 years	10.2	10.6	10.7	11.7	10.8	11.2	10.4	10.5	10.0	10.1	10.0	10.3	10.4	9.7	9.9
25 years and older	4.7	5.0	5.2	5.0	5.0	5.0	4.7	4.5	4.5	4.6	4.4	4.6	4.4	4.4	4.4
25 to 54 years	4.8	5.2	5.4	5.2	5.2	5.2	4.9	4.7	4.7	4.8	4.5	4.7	4.4	4.5	4.5
55 years and older	4.1	4.4	4.4	4.2	4.0	4.1	4.0	3.6	3.7	3.8	3.9	4.1	4.3	3.8	4.0
Women, 16 years and older	5.6	5.7	5.8	5.8	5.7	5.5	5.6	5.6	5.5	5.6	5.4	5.3	5.6	5.6	5.3
16 to 24 years	11.1	11.4	11.8	11.4	11.3	10.7	10.7	11.3	11.2	10.8	10.3	11.1	11.2	11.7	10.7
16 to 19 years	14.9	15.6	16.2	15.2	15.4	13.0	14.7	15.9	16.0	14.7	14.5	15.3	15.6	17.5	16.1
16 to 17 years	16.6	17.5	17.0	16.5	20.1	16.6	18.2	17.1	15.9	16.9	17.3	20.1	18.7	19.4	19.7
18 to 19 years	13.8	14.2	15.8	14.1	12.5	11.1	12.2	15.2	15.6	13.0	12.6	12.7	12.6	16.5	13.6
20 to 24 years	9.1	9.3	9.7	9.5	9.3	9.6	8.8	8.9	8.9	8.9	8.3	9.0	9.0	8.8	8.0
25 years and older	4.6	4.6	4.7	4.7	4.7	4.6	4.6	4.6	4.4	4.6	4.6	4.2	4.5	4.5	4.3
25 to 54 years	4.8	4.8	4.8	4.9	4.9	4.8	5.0	4.8	4.5	4.9	4.7	4.4	4.7	4.7	4.4
55 years and older[1]	3.6	3.7	4.5	3.8	3.4	3.5	3.5	4.1	3.9	3.5	3.3	3.3	3.8	3.8	3.9

[1] Data are not seasonally adjusted.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

10. Unemployment rates by State, seasonally adjusted

State	July 2003	June 2004[P]	July 2004[P]	State	July 2003	June 2004[P]	July 2004[P]
Alabama	5.8	5.3	5.7	Missouri	5.8	5.2	5.5
Alaska	8.1	7.3	7.2	Montana	4.8	4.8	4.3
Arizona	5.8	4.7	4.4	Nebraska	4.1	3.3	3.4
Arkansas	6.3	5.7	5.6	Nevada	5.4	4.2	4.4
California	6.9	6.3	6.1	New Hampshire	4.3	3.9	3.9
Colorado	6.2	4.9	5.1	New Jersey	6.1	4.7	5.0
Connecticut	5.7	4.6	4.6	New Mexico	6.7	5.4	5.3
Delaware	4.5	3.8	3.9	New York	6.4	6.2	5.9
District of Columbia	7.1	7.1	7.8	North Carolina	6.6	5.5	5.0
Florida	5.2	4.8	4.4	North Dakota	3.9	3.1	3.1
Georgia	4.9	4.0	4.1	Ohio	6.3	5.8	5.9
Hawaii	4.4	3.1	3.0	Oklahoma	5.9	4.9	4.4
Idaho	5.6	5.0	4.9	Oregon	8.7	6.9	6.8
Illinois	6.7	5.9	6.1	Pennsylvania	5.6	5.6	5.3
Indiana	5.5	4.8	5.1	Rhode Island	5.3	5.8	5.7
Iowa	4.7	4.3	4.4	South Carolina	7.2	6.6	6.0
Kansas	5.6	4.7	4.6	South Dakota	3.7	3.4	3.4
Kentucky	6.6	5.5	5.3	Tennessee	6.0	4.5	4.5
Louisiana	7.1	6.0	6.1	Texas	6.8	5.7	5.7
Maine	5.1	4.1	4.2	Utah	5.6	4.6	4.8
Maryland	4.6	3.9	4.1	Vermont	4.6	3.4	3.4
Massachusetts	5.8	5.3	5.3	Virginia	4.3	3.5	3.4
Michigan	7.5	6.5	6.8	Washington	7.7	6.1	6.0
Minnesota	5.1	4.4	4.4	West Virginia	6.4	5.3	5.2
Mississippi	6.6	5.4	5.9	Wisconsin	5.8	5.0	4.7
				Wyoming	4.3	3.6	3.6

[P] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

[In thousands]

State	July 2003	June 2004[P]	July 2004[P]	State	July 2003	June 2004[P]	July 2004[P]
Alabama	2,152,764	2,156,989	2,167,241	Missouri	3,021,052	3,022,776	3,031,153
Alaska	332,147	344,088	344,309	Montana	476,806	481,307	481,337
Arizona	2,695,055	2,750,987	2,763,150	Nebraska	978,314	986,448	988,438
Arkansas	1,260,518	1,315,193	1,318,377	Nevada	1,142,990	1,183,769	1,187,338
California	17,474,158	17,658,587	17,664,238	New Hampshire	721,563	728,990	733,568
Colorado	2,483,145	2,518,767	2,517,035	New Jersey	4,392,022	4,401,993	4,420,753
Connecticut	1,804,401	1,792,757	1,793,506	New Mexico	900,334	906,370	905,323
Delaware	417,844	427,054	426,689	New York	9,300,535	9,308,268	9,328,554
District of Columbia	303,107	298,632	297,251	North Carolina	4,252,576	4,197,317	4,189,247
Florida	8,175,968	8,381,480	8,376,234	North Dakota	346,627	349,799	349,136
Georgia	4,430,206	4,413,170	4,423,711	Ohio	5,931,721	5,850,479	5,865,587
Hawaii	618,980	629,404	630,145	Oklahoma	1,698,140	1,709,864	1,708,747
Idaho	693,847	705,911	706,581	Oregon	1,872,510	1,849,243	1,854,765
Illinois	6,334,785	6,342,412	6,383,808	Pennsylvania	6,164,395	6,238,816	6,264,923
Indiana	3,204,143	3,177,973	3,170,191	Rhode Island	575,527	569,184	572,203
Iowa	1,609,467	1,623,064	16,258,833	South Carolina	2,011,345	2,064,926	2,067,292
Kansas	1,439,662	1,464,740	1,465,684	South Dakota	425,335	424,597	424,612
Kentucky	1,965,011	1,986,376	1,988,405	Tennessee	2,905,840	2,921,022	2,920,548
Louisiana	2,034,920	2,031,818	2,047,402	Texas	10,926,468	10,933,523	10,952,132
Maine	693,772	699,900	697,576	Utah	1,185,735	1,205,963	1,206,172
Maryland	2,909,070	2,945,654	2,952,491	Vermont	351,084	353,437	354,122
Massachusetts	3,411,763	3,409,167	3,414,777	Virginia	3,782,883	3,847,802	3,845,635
Michigan	5,052,215	5,038,211	5,046,048	Washington	3,141,782	3,216,283	3,193,791
Minnesota	2,922,031	2,952,773	2,952,221	West Virginia	789,897	798,950	801,146
Mississippi	1,319,538	1,316,683	1,327,981	Wisconsin	3,089,908	3,113,997	3,108,564
				Wyoming	279,089	278,979	279,094

[P] = preliminary.

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the data base.

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
TOTAL NONFARM	130,341	129,931	129,789	129,856	129,944	130,027	130,035	130,194	130,277	130,630	130,954	131,162	131,258	131,331	131,475
TOTAL PRIVATE	108.828	108.356	108.209	108.317	108.384	108.483	108.491	108.667	108.738	109.077	109.382	109.618	109.730	109.790	109.910
GOODS-PRODUCING	22,557	21,817	21,712	21,697	21,674	21,686	21,668	21,696	21,684	21,778	21,822	21,894	21,891	21,906	21,942
Natural resources and mining	583	571	569	568	569	571	570	570	572	581	585	589	587	592	591
Logging	70.4	68.5	67.5	67.4	67.9	67.6	65.9	65.1	64.2	65.9	66.7	65.6	64.5	64.5	64.7
Mining	512.2	502.3	501.8	500.8	501.5	503.4	504.3	505.1	508.1	514.9	518.5	523.2	522.7	527.2	526.7
Oil and gas extraction	121.9	122.9	123.2	123.6	124.1	123.9	124.6	126.9	128.9	130.0	131.0	132.3	132.0	132.0	132.6
Mining, except oil and gas[1]	210.6	202.7	203.6	201.6	202.1	202.4	202.0	200.0	200.6	202.8	205.2	207.8	207.9	210.9	208.5
Coal mining	74.4	70.4	70.7	69.2	69.6	69.5	69.8	69.6	70.2	70.6	71.8	72.9	73.5	75.0	74.5
Support activities for mining	179.8	176.8	175.0	175.6	175.3	177.1	177.7	178.2	178.6	182.1	182.3	183.1	182.8	184.3	185.6
Construction	6,716	6,722	6,739	6,754	6,754	6,771	6,774	6,812	6,791	6,853	6,872	6,909	6,911	6,915	6,930
Construction of buildings	1.574.8	1.575.9	1.570.0	1.577.7	1.579.4	1.583.9	1.585.1	1.593.3	1.590.9	1.607.6	1.609.8	1.622.9	1.625.9	1.630.3	1.637.6
Heavy and civil engineering	930.6	910.7	913.9	915.2	910.8	918.8	920.7	928.0	924.0	926.8	924.7	924.3	920.9	921.6	922.4
Specialty trade contractors	4,210.4	4,235.5	4,255.5	4,260.9	4,263.7	4,268.6	4,268.4	4,290.2	4,276.5	4,318.9	4,337.3	4,362.2	4,364.6	4,363.0	4,369.8
Manufacturing	15,259	14,525	14,404	14,375	14,351	14,344	14,324	14,314	14,321	14,344	14,365	14,396	14,393	14,399	14,421
Production workers	10.766	10.200	10.104	10.077	10.058	10.048	10.044	10.035	10.038	10.058	10.085	10.123	10.128	10.143	10.169
Durable goods	9,483	8,970	8,886	8,867	8,854	8,874	8,868	8,869	8,882	8,889	8,924	8,946	8,955	8,959	8,995
Production workers	6.529	6.157	6.099	6.077	6.066	6.089	6.079	6.081	6.088	6.101	6.126	6.152	6.164	6.171	6.202
Wood products	554.9	536.1	528.9	531.8	533.4	536.3	536.6	536.3	538.4	539.7	540	543	543.8	544.2	545.1
Nonmetallic mineral products	516.0	492.6	490.2	488	486.6	489.7	487.5	492.7	490.5	493.2	497.8	501.4	501.7	502.4	502.1
Primary metals	509.4	476.7	470.6	466.3	463.4	464.1	464.6	432.2	462.2	462.0	462.5	464.0	465.4	466.4	465.3
Fabricated metal products	1.548.5	1.478.4	1.465.6	1.461.1	1.461.3	1.468.1	1.471.2	1.471.8	1.476.6	1.478.5	1.486.7	1.494.5	1.497.6	1.503.1	1.507.8
Machinery	1.229.5	1.153.5	1.140.8	1.139.4	1.137.0	1.142.5	1.140.4	1.138.7	1.141.2	1.145.1	1.152.0	1.153.3	1.156.7	1.161.9	1.165.4
Computer and electronic products[1]	1,507.2	1,360.9	1,343.8	1,339.2	1,332.8	1,334.4	1,332.2	1,333.2	1,333.9	1,338.0	1,339.7	1,345.8	1,346.2	1,352.4	1,355.7
Computer and peripheral equipment	250.0	225.7	222.5	221.9	219.3	219.1	217.8	219.4	219.0	218.6	218.1	218.8	217.7	218.4	220.4
Communications equipment	185.8	157.0	155.0	154.1	1 53.9	154.4	153.0	154.8	154.8	155.0	155.1	155.9	157.1	158.6	159.3
Semiconductors and electronic components	524.5	461.8	456.2	453.3	449.4	451.2	451.3	450.2	451.4	452.1	453.4	455.8	458.0	460.2	461.0
Electronic instruments	450.0	429.3	425.2	425.5	425.1	425.2	425.3	423.7	423.3	426.8	427.5	430.1	429.8	431.8	431.5
Electrical equipment and appliances	496.5	459.9	453.8	452.1	450.8	450.9	451.2	449.8	448.6	446.8	446.5	447.3	448.6	449.9	450.3
Transportation equipment	1,828.9	1,775.4	1,766.5	1,765.6	1,765.5	1,766.5	1,762.7	1,760.6	1,766.5	1,769.1	1,768.8	1,764.4	1,765.1	1,747.6	1,775.5
Furniture and related products	604.1	573.5	568.1	568.0	568.2	568.9	569.3	571.3	571.2	573.4	576.5	577.6	575.0	576.2	572.9
Miscellaneous manufacturing	688.3	662.8	657.9	655.9	655.2	652.7	651.9	652.0	653.0	653.0	653.0	654.4	654.6	655.2	654.4
Nondurable goods	5,775	5,555	5,518	5,508	5,497	5,470	5,456	5,445	5,439	5,445	5,441	5,450	5,438	5,440	5,426
Production workers	4,239	4,043	4,005	4,000	3,992	3,959	3,965	3,954	3,950	3,957	3,959	3,971	3,964	3,972	3,967
Food manufacturing	1,525.7	1,518.7	1,523.8	1,526.0	1,528.2	1,508.3	1,506.3	1,500.7	1,502.4	1,504.5	1,502.7	1,507.0	1,502.8	1,506.0	1,499.8
Beverages and tobacco products	207.4	200.6	201.0	200.2	201.0	198.3	198.3	197.7	195.9	197.2	197.8	197.5	197.6	197.3	196.1
Textile mills	290.9	260.3	251.8	250.2	247.0	245.1	241.0	239.2	237.3	237.1	235.8	236.1	235.0	236.0	235.7
Textile product mills	194.6	179.8	170.7	173.7	172.6	175.2	174.3	176.9	176.6	179.7	180.1	181.4	179.7	179.0	178.4
Apparel	359.7	312.7	304.0	299.8	299.7	297.7	297.7	296.1	297.1	294.3	292.7	290.8	286.8	284.3	282.4
Leather and allied products	50.2	45.2	44.3	44.2	43.7	44.1	44.3	44.6	44.8	44.8	44.6	45.1	44.7	45.0	44.1
Paper and paper products	546.6	519.0	515.1	513.8	513.3	511.7	510.3	509.8	508.0	508.8	507.0	508.1	506.7	509.8	511.3
Printing and related support activities	706.6	680.0	678.8	676.2	673.3	673.1	670.1	667.6	665.0	664.4	663.6	665.9	667.0	664.0	662.3
Petroleum and coal products	118.1	114.6	113.8	112.9	112.6	112.0	112.4	114.3	112.9	113.1	112.6	113.1	113.8	113.5	114.1
Chemicals	927.5	7.9	905.4	902.7	899.1	897.6	895.9	893.7	894.7	894.9	896.4	895.0	895.2	894.4	893.4
Plastics and rubber products	848.0	815.9	808.8	808.4	806.3	806.5	805.8	804.8	803.9	806.3	807.5	810.2	808.6	811.1	808.7
SERVICE-PROVIDING	107,784	108,114	108,077	108,159	108,270	108,341	108,367	108,498	108,593	108,852	109,132	109,268	109,367	109,425	109,533
PRIVATE SERVICE-PROVIDING	86,271	86,538	82,497	86,620	86,710	86,797	86,823	86,971	87,054	87,299	87,560	87,724	87,839	87,884	87,968
Trade, transportation, and utilities	25,497	25,275	25,225	25,252	25,272	25,261	25,211	25,312	25,331	25,415	25,448	25,477	25,497	25,499	25,487
Wholesale trade	5,652.3	5,605.0	5,589.0	5,585.1	5,581.6	5,592.7	5,598.4	5,611.4	5,612.2	5,623.5	5,632.5	5,636.7	5,639.5	5,649.3	5,651.9
Durable goods	3,007.9	2,949.2	2,936.2	2,932.1	2,932.0	2,943.9	2,945.8	2,954.9	2,953.8	2,963.4	2,967.5	2,969.7	2,975.6	2,988.1	2,991.7
Nondurable goods	2,015.0	2,002.1	1,997.9	1,995.9	1,992.4	1,989.2	1,991.8	1,993.7	1,994.5	1,995.3	1,996.3	1,997.2	1,994.3	1,990.2	1,989.2
Electronic markets and agents and brokers	629.4	654.3	651.9	6657.1	657.2	659.6	660.8	662.8	663.9	664.8	668.7	669.8	669.6	671.0	671.0
Retail trade	15.025.1	14.911.5	14.911.6	14.926.8	14.948.1	14.921.7	14.876.0	14.944.8	14.963.0	15.013.0	15.037.1	15.047.6	15.054.9	15.040.8	15.029.5
Motor vehicles and parts dealers[1]	1,879.4	1,883.5	1,883.5	1,889.8	1,889.7	1,892.9	1,893.7	1,895.4	1,900.9	1,906.9	1,910.9	1,911.4	1,908.5	1,907.8	1,901.7
Automobile dealers	1,252.8	1,255.1	1,257.0	1,259.7	1,259.6	1,258.9	1,259.5	1,261.3	1,262.9	1,263.9	1,264.7	1,263.6	1,262.3	1,260.3	1,256.5
Furniture and home furnishings stores	538.7	542.9	538.0	539.7	540.2	544.8	547.2	546.4	544.5	544.8	544.5	545.7	546.3	547.8	549.4
Electronics and appliance stores	525.3	511.9	507.4	506.7	506.5	512.8	511.9	509.3	508.2	511.7	514.1	512.6	511.5	509.6	506.8

See notes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
Building material and garden supply stores	1,176.5	1,191.1	1,194.7	1,203.4	1,204.0	1,210.0	1,209.5	1,221.4	1,231.4	1,243.5	1,247.3	1,248.7	1,245.8	1,245.7	1,248.3
Food and beverage stores	2,881.6	2,840.9	2,833.6	2,829.4	2,838.7	2,821.4	2,813.9	2,826.3	2,831.3	2,838.9	2,839.9	2,845.3	2,839.7	2,834.8	2,831.7
Health and personal care stores	938.8	943.1	941.0	943.1	948.3	951.6	952.6	954.1	954.9	958.2	957.9	957.1	957.2	956.7	957.0
Gasoline stations	895.9	879.9	881.4	877.9	873.8	875.2	871.1	875..1	871.8	873.0	872.4	871.6	870.3	868.2	868.0
Clothing and clothing accessories stores	1,312.5	1,296.7	1,294.8	1,295.6	1,302.6	1,297.1	1,301.0	1,304.3	1,311.3	1,321.8	1,328.0	1,335.5	1,346.5	1,349.4	1,350.2
Sporting goods, hobby, book, and music stores	661.3	645.0	642.5	642.8	642.0	641.6	633.2	635.9	636.8	636.5	635.8	636.1	635.7	634.6	633.9
General merchandise stores[1]	2,812.0	2,815.2	2,834.9	2,839.9	2,842.9	2,826.4	2,793.4	2,822.7	2,822.5	2,824.4	2,831.0	2,830.5	2837.4	2831.2	2828.9
Department stores	1,684.0	1,618.8	1,622.3	1,623.7	1,623.5	1,612.6	1,601.3	1,603.4	1,602.7	1,604.9	16.7	1,610.9	1,614.9	1,613.5	1,610.3
Miscellaneous store retailers	959.5	934.1	931.9	931.7	933.5	930.9	924.4	929.6	924.6	926.9	927.9	925.7	928.4	927.5	926.9
Nonstore retailers	443.7	427.5	427.9	426.8	425.9	417.3	424.1	424.3	424.8	427.4	429.8	427.4	427.6	427.5	426.7
Transportation and warehousing	4,223.6	4,176.7	4,148.4	4,160.8	4,162.9	4,168.0	4,157.0	4,175.9	4,175.8	4,197.0	4,196.5	4,209.9	4220.9	4226.8	4225.4
Air transportation	563.5	527.3	512.4	511.8	506.1	511.5	512.9	510.2	511.6	512.9	513.3	514.7	513.8	512.3	510.2
Rail transportation	217.8	215.4	213.8	215.6	215.2	215.5	215.5	215.4	215.7	216.0	216.3	216.4	217.3	217.7	217.3
Water transportation	52.6	52.5	52.9	51.5	52.5	50.9	50.0	50.6	48.8	49.2	50.6	51.1	51.7	51.8	50.8
Truck transportation	1,339.3	1,328.0	1,329.6	1,328.7	1,329.3	1,335.7	1,338.7	1,343.6	1,344.1	1,346.4	1,352.2	1,353.9	1,353.9	1,359.5	1,359.5
Transit and ground passenger transportation	380.8	380.3	371.2	380.7	389.2	385.7	385.0	382.3	380.1	380.5	372.3	381.5	374.6	373.7	375.5
Pipeline transportation	41.7	40.0	39.5	39.3	39.0	38.7	38.8	38.3	38.2	38.1	38.1	38.3	38.4	38.5	38.5
Scenic and sightseeing transportation	25.6	28.0	28.9	28.9	29.0	28.7	29.4	28.7	29.7	31.4	31.1	30.6	32.6	33.0	33.3
Support activities for transportation	524.7	516.3	512.2	515.4	514.3	512.4	511.6	514.1	515.5	518.5	519.1	519.5	520.8	522.6	521.3
Couriers and messengers	560.9	566.6	566.7	566.5	565.0	564.7	559.0	566.9	567.7	572.1	570.9	572.8	578.2	579.7	580.9
Warehousing and storage	516.7	522.3	521.2	522.4	522.6	524.2	516.1	525.8	524.4	531.9	532.6	531.1	534.0	537.3	538.1
Utilities	596.2	580.8	578.8	578.9	579.2	578.9	579.3	580.2	580.0	581.2	582.1	582.3	581.7	581.9	580.2
Information	3,395	3,198	3,174	3,175	3,166	3,172	3,175	3,163	3,169	3,169	3,173	3,177	3,182	3,176	3,166
Publishing industries, except Internet	964.1	926.4	922.0	919.3	918.0	918.4	917.4	914.0	915.1	915.3	916.3	916.2	916.6	914.3	913.0
Motion picture and sound recording industries	387.9	376.1	369.9	375.4	373.4	382.7	385.2	379.7	382.7	381.2	385.7	390.8	394.9	393.5	389.3
Broadcasting, except Internet	334.1	327.0	325.5	327.6	326.0	327.0	329.5	329.7	331.8	333.0	333.3	335.4	335.5	336.0	336.0
Internet publishing and broadcasting	33.7	30.0	30.0	30.1	29.9	30.4	30.4	30.8	31.9	31.9	32.5	32.5	33.6	33.6	34.0
Telecommunications	1,186.5	1,082.6	1,071.3	1,069.4	1,065.2	1,062.2	1,061.2	1,061.3	1,058.2	1,055.0	1,051.9	1,047.3	1,044.8	1,042.6	1,038.1
ISPs, search portals, and data processing	441.0	407.5	407.6	405.4	404.8	402.6	402.6	400.1	401.1	403.7	404.0	405.1	406.5	405.7	405.1
Other information services	47.3	48.1	47.8	48.0	48.3	48.2	48.2	47.8	48.0	48.6	49.6	49.6	50.0	49.8	50.3
Financial activities	7,847	7,974	7,996	8,004	7,990	7,985	7,981	7,981	7,989	8,003	8,015	8,029	8,049	8,039	8,057
Finance and insurance	5,817.3	5,920.5	5,936.8	5,945.6	5,930.2	5,922.7	5,916.5	5,917.1	5,924.7	5,933.0	5,947.7	5,946.0	5,960.4	5,948.8	5,957.3
Monetary authorities—central bank	23.4	22.7	22.6	22.6	22.5	22.5	22.5	22.4	22.4	22.3	22.3	21.8	21.9	21.7	21.8
Credit intermediation and related activities[1]	2,686.0	2,785.6	2,806.0	2,808.1	2,801.0	2,790.3	2,783.3	2,785.3	2,787.2	2,793.8	2,802.1	2,800.8	2,809.9	2,802.3	2,803.6
Depository credit intermediation[1]	1,733.0	1,752.1	1,756.0	1,757.9	1,760.1	1,758.1	1,757.1	1,758.7	1,762.6	1,762.8	1,765.0	1,765.2	1,768.8	1,766.3	1,766.0
Commercial banking	1,278.1	1,281.1	1,283.9	1,283.6	1,284.4	1,280.5	1,278.9	1,280.4	1,283.5	1,284.1	1,285.0	1,284.2	1,285.9	1,283.4	1,281.7
Securities, commodity contracts, investments	789.4	764.4	758.7	761.7	762.0	769.1	771.9	773.8	778.2	780.8	781.0	782.8	787.2	787.2	791.1
Insurance carriers and related activities	2,233.2	2,266.1	2,268.7	2,271.9	2,264.7	2,261.2	2,258.1	2,255.8	2,257.4	2,257.1	2,259.5	2,262.7	2,263.8	2,259.5	2,262.6
Funds, trusts, and other financial vehicles	85.4	81.7	80.8	81.3	80.0	79.6	80.7	79.8	79.5	79.0	78.8	77.9	77.6	78.1	78.2
Real estate and rental and leasing	2,029.8	2,053.6	2,058.8	2,057.9	2,060.2	2,062.7	2,064.0	2,063.6	2,064.5	2,069.5	2,071.6	2,083.1	2,088.1	2,090.6	2,100.1
Real estate	1,352.9	1,384.4	1,386.6	1,388.8	1,390.6	1,394.5	1,395.7	1,397.7	1,400.2	1,405.8	1,409.2	1,418.7	1,418.8	1,420.9	1,423.5
Rental and leasing services	649.1	640.8	643.4	639.8	639.9	639.0	638.3	636.0	634.2	634.1	633.2	635.4	640.5	641.3	648.6
Lessors of nonfinancial intangible assets	27.6	28.4	28.8	29.3	29.7	29.2	30.0	29.9	30.1	29.6	29.2	29.0	28.8	28.4	28.0
Professional and business services	15,976	15,999	15,998	16,051	16,070	16,114	16,159	16,172	16,196	16,237	16,363	16,432	16,457	16,504	16,536
Professional and technical services[1]	6,675.6	6,623.5	6,578.1	6,606.3	6,624.1	6,647.9	6,669.3	6,657.9	6,658.1	6,679.8	6,701.4	6,708.1	6,732.6	6,742.3	6,764.1
Legal services	1,115.3	1,136.8	1,133.8	1,136.6	1,140.4	1,142.9	1,140.5	1,138.7	1,139.2	1,138.4	1,141.9	1,143.3	1,146.3	1,147.8	1,147.1
Accounting and bookkeeping services	837.3	815.6	800.7	802.5	801.5	810.6	826.6	815.2	813.3	812.8	818.5	806.3	811.6	813.7	817.0
Architectural and engineering services	1,246.1	1,228.0	1,222.0	1,230.1	1,230.9	1,233.9	1,235.2	1,230.9	1,240.0	1,246.4	1,254.1	1,258.3	1,261.9	1,263.7	1,267.2

See notes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		2003					2004							
	2002	2003	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
Computer systems design and related services	1,152.8	1,108.3	1,094.5	1,103.3	1,107.0	1,105.7	1,105.7	1,104.6	1,099.8	1,103.5	1,103.5	1,110.1	1,117.7	1,121.5	1,130.9
Management and technical consulting services	734.4	747.3	744.2	749.3	755.6	760.6	764.0	765.4	767.9	774.0	780.9	785.9	791.4	792.3	796.1
Management of companies and enterprises	1,705.4	1,675.5	1,671.4	1,671.7	1,669.1	1,671.6	1,670.2	1,675.1	1,675.6	1,676.6	1,679.7	1,683.3	1,684.5	1,686.3	1,678.6
Administrative and waste services	7,595.2	7,698.3	7,748.1	7,773.1	7,776.3	7,794.5	7,819.2	7,838.5	7,862.4	7,880.1	7,982.3	8,040.1	8,040.0	8,075.0	8,093.7
Administrative and support services[1]	7,276.8	73,764.0	7,427.0	7,451.6	7,456.0	7,473.7	7,496.3	7,517.5	7,539.6	7,556.8	7,657.0	7,715.6	7,713.0	7,747.9	7,766.0
Employment services[1]	3,246.5	3,336.2	3,366.2	3,389.1	3,402.0	3,427.6	3,461.3	3,473.8	3,493.8	3,492.3	3,553.7	3,591.5	3,573.4	3,607.4	3,616.4
Temporary help services	2,193.7	2,243.2	2,262.3	2,287.2	2,291.7	2,319.4	2,355.3	2,344.3	2,370.4	2,380.3	2,423.8	2,451.7	2,449.4	2,453.9	2,463.7
Business support services	756.6	747.4	748.7	753.2	753.2	746.7	745.1	739.0	739.8	746.0	748.6	751.2	754.0	751.1	750.2
Services to buildings and dwellings	1,606.1	1,631.7	1,648.4	1,645.2	1,639.6	1,639.4	1,635.9	1,637.1	1,639.5	1,646.2	1,674.5	1,686.0	1,694.1	1,694.3	1,696.6
Waste management and remediation services	318.3	321.9	321.1	321.5	320.3	320.8	322.9	321	322.8	323.3	325.3	324.5	327	327.1	327.7
Educational and health services	16,199	16,577	16,591	16,672	16,678	16,705	16,731	16,746	16,764	16,813	16,854	16,871	16,897	16,913	16,958
Educational services	2,642.8	2,688.5	2,673.9	2,689.1	2,707.7	2,723.1	2,728.0	2,729.3	2,727.4	2,736.0	2,740.8	2,731.1	2,727.4	2,731.8	2,734.4
Health care and social assistance	13,555.7	13,888.0	13,916.8	13,933.3	13,970.0	13,981.5	14,003.2	14,017.1	14,036.8	14,077.1	14,113.1	14,140.1	14,169.8	14,181.0	14,223.4
Ambulatory health care services[1]	4,633.2	4,776.0	4,791.9	4,792.8	4,812.8	4,818.7	4,831.0	4,840.3	4,855.3	4,868.0	4,883.6	4,896.8	4,909.6	4,922.8	4,934.2
Offices of physicians	1,967.8	2,003.8	2,007.1	2,008.2	2,018.5	2,023.3	2,030.0	2,032.3	2,034.4	2,043.5	2,046.1	2,049.6	2,053.9	2,056.4	2,059.1
Outpatient care centers	413.0	423.1	423.5	422.9	423.3	426.4	425.0	427.8	431.1	430.3	432.2	435.1	436.0	438.2	439.2
Home health care services	679.8	727.1	733.7	732.8	737.7	735.7	739.9	740.2	741.5	743.8	748.4	751.7	754.2	757.9	760.0
Hospitals	4,159.6	4,252.5	4,260.2	4,264.4	4,268.9	4,278.1	4,283.9	4,287.8	4,284.1	4,298.0	4,305.1	4,315.4	4,318.3	4,323.4	4,331.4
Nursing and residential care facilities[1]	2,743.3	2,784.3	2,787.7	2,789.3	2,794.2	2,792.8	2,793.0	2,792.1	2,791.1	2,798.4	2,802.8	2,806.3	2,809.0	2,812.8	2,816.2
Nursing care facilities	1,573.2	1,582.8	1,580.5	1,583.1	1,585.2	1,584.1	1,581.7	1,580.3	1,578.7	1,582.1	1,584.0	1,585.3	1,586.5	1,587.6	1,588.8
Social assistance[1]	2,019.7	2,075.2	2,080.0	2,086.8	2,094.1	2,091.9	2,095.3	2,096.9	2,106.3	2,112.7	2,121.6	2,121.6	2,132.9	2,122.0	2,141.6
Child day care services	744.1	760.5	764.5	765.8	771.6	766.3	770	766.3	772.2	773.7	777.6	777.1	786	790.3	794.9
Leisure and hospitality	11,986	12,128	12,117	12,126	12,147	12,178	12,192	12,218	12,229	12,271	12,303	12,331	12,339	12,340	12,346
Arts, entertainment, and recreation	1,782.6	1,801.0	1,795.0	1,794.4	1,796.9	1,799.4	1,795.2	1,801.4	1,796.7	1,798.7	1,791.1	1,793.1	1,792.0	1,786.1	1,787.3
Performing arts and spectator sports	363.7	370.2	366.7	372.0	369.6	371.7	368.8	369.4	366.5	364.6	361.4	358.8	359.3	353.8	353.6
Museums, historical sites, zoos, and parks	114.0	114.1	114.5	113.4	114.2	113.3	113.1	113.4	113.7	114.2	114.6	115.6	116.1	117.0	117.6
Amusements, gambling, and recreation	1,305.0	1,316.6	1,313.8	1,309.0	1,313.1	1,314.4	1,313.3	1,318.6	1,316.5	1,319.9	1,315.1	1,318.7	1,316.6	1,315.3	1,316.1
Accommodations and food services	10,203.2	10,324.4	10,321.8	10,331.7	10,350.4	10,378.9	10,396.3	10,416.5	10,432.3	10,742.0	10,511.8	105,837.9	10,546.7	10,554.3	10,558.8
Accommodations	1,778.6	1,765.2	1,755.0	1,739.1	1,733.7	1,751.7	1,763.0	1,752.1	1,754.4	1,753.4	1,758.5	1,758.5	1,764.7	1,762.3	1,763.4
Food services and drinking places	8,424.6	8,559.2	8,566.8	8,592.6	8,616.7	8,627.2	8,633.3	8,664.4	8,677.9	8,718.6	8,753.3	8,779.4	8,782.0	8,792.0	8,795.4
Other services	5,372	5,393	5,396	5,390	5,387	5,382	5,374	5,379	5,376	5,391	5,404	5,407	5,418	5,413	5,418
Repair and maintenance	1,246.9	1,236.2	1,242.4	1,240.4	1,237.6	1,234.4	1,228.5	1,233.5	1,230.5	1,239.4	1,238.2	1,237.7	1,235.1	1,234.8	1,232.7
Personal and laundry services	1,257.2	1,258.2	1,257.3	1,252.7	1,254.6	1,254.1	1,250.2	1,251.2	1,247.6	1,255.9	1,260.5	1,265.5	1,268.4	1,264.5	1,267.0
Membership associations and organizations	2,867.8	2,898.0	2,895.9	2,896.5	2,895.2	2,893.9	2,895.7	2,894.5	2,898.3	2,895.2	2,904.8	2,903.7	2,914.9	2,913.6	2,918.0
Government	21,513	21,575	21,580	21,539	21,560	21,544	21,544	21,527	21,539	21,553	21,572	21,544	21,528	21,541	21,565
Federal	2,767	2,756	2,750	2,747	2,736	2,723	2,720	2,715	2,716	2,710	2,727	2,712	2,716	2,712	2,718
Federal, except U.S. Postal Service	1,923.8	1,947.0	1,942.2	1,942.1	1,932.9	1,924.9	1,928.9	1,921.5	1,923.8	1,921.1	1,939.5	1,925.7	1,930.5	1,925.6	1,933.6
U.S. Postal Service	842.4	809.1	808.0	804.8	803.3	798.1	791.4	793.1	791.7	789.1	787.3	786.5	785.4	786.8	784.0
State	5,029	5,017	4,997	5,019	5,031	5,023	5,027	5,007	5,018	5,023	5,019	5,004	5,004	5,021	5,030
Education	2,242.8	2,266.4	2,258.7	2,278.8	2,290.4	2,282.5	2,285.7	2,268.0	2,279.6	2,283.2	2,278.3	2,261.4	2,257.8	2,271.2	2,275.3
Other State government	2,786.3	2,750.7	2,738.2	2,740.4	2,740.4	2,740.0	2,740.9	2,738.9	2,738.4	2,739.7	2,740.6	2,742.8	2,746.1	2,749.5	2,754.2
Local	13,718	13,802	13,833	13,773	13,793	13,798	13,797	13,805	13,805	13,820	13,826	13,828	13,808	13,808	13,817
Education	7,654.4	7,699.1	7,742.4	7,673.9	7,687.0	7,684.5	7,687.1	7,692.2	7,694.3	7,704.7	7,710.9	7,710.2	7,695.1	7,693.0	7,697.1
Other local government	6,063.2	6,104.0	6,090.1	6,099.3	6,105.9	6,113.1	6,109.7	6,112.7	6,110.8	6,114.8	6,115.4	6,117.9	6,113.3	6,115.1	6,119.4

[1] Includes other industries not shown separately.

p = preliminary.

NOTE: Data reflect the conversion to the 2002 version of the North American industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

13. Average weekly hours of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
TOTAL PRIVATE	33.9	33.7	33.6	33.6	33.7	33.8	33.6	33.8	33.8	33.8	33.7	33.8	33.6	33.8	33.8
GOODS-PRODUCING	39.9	39.8	39.7	39.8	39.9	40.1	39.9	40.2	40.3	40.2	40.0	40.3	40.0	40.2	40.1
Natural resources and mining	43.2	43.6	43.6	43.6	43.7	43.9	43.6	44.5	44.1	44.2	44.3	44.2	43.9	44.1	44.2
Construction	38.4	38.4	38.5	38.4	38.4	38.5	38.1	38.5	38.5	38.6	38.2	38.3	38.1	38.4	38.1
Manufacturing	40.5	40.4	40.2	40.4	40.5	40.8	40.6	41.0	41.0	40.9	40.7	41.1	40.8	40.9	40.9
Overtime hours	4.2	4.2	4.1	4.2	4.3	4.5	4.5	4.5	4.6	4.6	4.5	4.6	4.6	4.6	4.6
Durable goods	40.8	40.8	40.5	40.8	40.9	41.3	41.2	41.5	41.5	41.4	41.2	41.6	41.2	41.4	41.4
Overtime hours	4.2	4.3	4.2	4.3	4.4	4.7	4.7	4.7	4.8	4.8	4.7	4.8	4.7	4.7	4.7
Wood products	39.9	40.4	40.4	40.4	40.6	41.2	41.0	40.9	41.1	41.0	41.0	41.4	40.5	40.8	40.9
Nonmetallic mineral products	42.0	42.2	42.1	41.9	42.1	42.4	42.3	42.5	42.5	42.9	42.3	42.0	41.8	42.1	42.2
Primary metals	42.4	42.3	41.9	42.2	42.3	42.7	42.7	43.1	43.0	43.2	43.1	43.4	43.5	43.5	43.6
Fabricated metal products	40.6	40.7	40.5	40.7	40.8	40.9	40.8	41.2	41.2	41.1	41.0	41.3	41.0	41.2	41.1
Machinery	40.5	40.8	40.7	41.0	40.9	41.1	41.1	41.8	41.8	41.7	41.6	42.3	42.0	42.2	42.0
Computer and electronic products	39.7	40.4	41.0	40.6	40.7	40.7	40.4	40.8	41.2	40.7	40.5	40.8	40.5	40.9	40.9
Electrical equipment and appliances	40.1	40.6	40.6	40.6	40.9	40.8	40.7	41.1	40.7	40.8	40.8	41.6	40.8	40.9	40.8
Transportation equipment	42.5	41.9	40.7	42.0	41.9	42.7	42.7	42.8	42.9	42.8	42.4	42.8	42.3	42.4	42.4
Furniture and related products	39.2	38.9	39.1	39.1	39.1	39.9	39.7	39.7	39.4	39.6	39.5	40.0	39.7	39.5	39.7
Miscellaneous manufacturing	38.6	38.4	38.1	38.3	38.3	38.9	38.5	39.0	38.7	38.7	38.3	38.9	38.4	38.7	38.5
Nondurable goods	40.1	39.8	39.6	39.8	39.9	40.1	39.9	40.2	40.3	40.1	40.0	40.3	40.1	40.1	40.2
Overtime hours	4.2	4.1	3.6	4.1	4.1	4.3	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4
Food manufacturing	39.6	39.3	39.2	39.3	39.3	39.2	39.1	39.5	39.4	39.3	39.1	39.6	39.4	39.3	39.2
Beverage and tobacco products	39.4	39.1	38.8	39.1	38.8	39.9	39.1	39.6	40.3	39.4	39.6	39.2	38.7	39.1	39.5
Textile mills	40.6	39.1	38.7	39.0	39.1	40.0	39.7	40.0	40.0	40.2	39.5	40.3	40.3	40.6	40.6
Textile product mills	39.2	39.6	40.0	40.7	40.4	40.0	39.8	39.4	39.9	38.8	38.3	38.8	38.9	38.6	38.9
Apparel	36.7	35.6	34.8	35.1	35.8	36.2	35.8	35.7	36.2	36.3	35.9	36.1	35.9	36.1	36.4
Leather and allied products	37.5	39.3	38.9	38.4	38.9	39.3	40.3	39.8	39.5	39.4	39.1	38.4	38.0	37.2	37.6
Paper and paper products	41.8	42.1	41.2	41.2	41.5	41..9	41.8	41.9	42.0	41.8	41.9	42.6	42.0	42.5	43.0
Printing and related support activities	38.4	38.2	38.0	38.2	38.5	38.4	38.2	38.6	38.6	38.4	38.4	38.6	38.5	38.7	38.5
Petroleum and coal products	43.0	44.5	44.4	44.2	44.9	45.6	44.2	43.8	44.1	43.7	43.9	45.0	45.0	45.0	47.1
Chemicals	42.3	42.4	42.3	42.2	42.0	42.7	42.5	42.9	43.2	43.0	43.0	42.9	42.6	42.8	42.9
Plastics and rubber products	40.6	40.4	40.3	40.5	40.6	40.7	40.4	40.8	40.9	40.9	40.7	40.9	40.8	40.5	40.4
PRIVATE SERVICE-PROVIDING	32.5	32.4	32.3	32.3	32.3	32.4	32.2	32.4	32.4	32.4	32.3	32.4	32.3	32.4	32.4
Trade, transportation, and utilities	33.6	33.5	33.5	33.5	33.6	33.6	33.5	33.6	33.7	33.6	33.5	33.5	33.3	33.4	33.5
Wholesale trade	38.0	37.8	37.9	37.8	38.0	38.0	37.8	37.9	38.0	38.0	38.0	37.8	37.6	37.8	37.7
Retail trade	30.9	30.9	30.9	30.9	30.9	30.9	30.8	31.0	30.9	30.8	30.7	30.7	30.5	30.6	30.7
Transportation and warehousing	36.8	36.9	36.9	36.9	37.1	37.0	36.7	36.9	37.2	36.9	36.9	37.3	36.9	37.0	37.0
Utilities	40.9	41.1	41.0	40.4	41.0	41.4	40.8	40.8	41.0	41.2	41.2	41.3	41.1	40.8	40.9
Information	36.5	36.2	36.2	36.1	36.1	36.3	36.2	36.2	36.3	36.3	36.3	36.4	36.5	36.3	36.5
Financial activities	35.6	35.5	35.5	35.4	35.5	35.5	35.3	35.7	35.5	35.5	35.6	35.8	35.5	35.6	35.5
Professional and business services	34.2	34.1	33.9	33.9	34.0	34.1	33.8	34.1	34.2	34.1	34.1	34.2	33.9	34.2	34.2
Education and health services	32.4	32.3	32.4	32.3	32.3	32.4	32.4	32.4	32.4	32.4	32.4	32.5	32.5	32.6	32.7
Leisure and hospitality	25.8	25.6	25.5	25.5	25.6	25.7	25.6	25.7	25.8	25.7	25.7	25.7	25.7	25.6	25.5
Other services	32.0	31.4	31.3	31.2	31.3	31.2	31.0	31.1	31.1	31.2	31.1	31.2	31.0	31.1	31.1

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

p = preliminary.

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

14. Average hourly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
TOTAL PRIVATE															
Current dollars	$14.95	$15.35	$15.41	$15.41	$15.43	$15.46	$15.45	$15.49	$15.52	$15.55	$15.59	$15.63	$15.66	$15.72	$15.77
Constant (1982) dollars	8.24	8.27	8.28	8.25	8.28	8.23	8.30	8.27	8.27	8.24	8.25	8.21	8.20	8.24	8.26
GOODS-PRODUCING	16.33	16.80	16.86	16.91	16.90	16.94	16.97	17.00	17.06	17.08	17.13	17.13	17.16	17.19	17.24
Natural resources and mining	17.19	17.58	17.62	17.66	17.72	17.79	17.91	17.95	18.01	18.10	18.08	18.10	18.24	18.16	18.18
Construction	18.52	18.95	19.01	19.05	19.06	19.06	19.04	19.11	19.18	19.17	19.20	19.20	19.19	19.22	19.24
Manufacturing	15.29	15.74	15.79	15.84	15.83	15.89	15.93	15.94	15.99	16.01	16.08	16.08	16.13	16.15	16.22
Excluding overtime	14.54	14.96	15.02	15.06	15.03	15.06	15.09	15.11	15.14	15.16	15.24	15.23	15.27	15.29	15.36
Durable goods	16.02	16.46	16.50	16.57	16.54	16.58	16.64	16.63	16.68	16.69	16.75	16.75	16.78	16.80	16.88
Nondurable goods	14.15	14.63	14.68	14.70	14.72	14.79	14.81	14.85	14.89	14.93	15.00	15.02	15.08	15.11	15.17
PRIVATE SERVICE-PROVIDING	14.56	14.96	15.02	15.01	15.03	15.06	15.05	15.08	15.10	15.13	15.17	15.23	15.26	15.32	15.38
Trade,transportation, and utilities	14.02	14.34	14.40	14.38	14.41	14.44	14.41	14.45	14.49	14.50	14.57	14.61	14.65	14.71	14.74
Wholesale trade	16.98	17.36	17.43	17.44	17.47	17.47	17.46	17.53	17.54	17.54	17.60	17.63	17.67	17.73	17.71
Retail trade	11.67	11.90	11.95	11.94	11.95	11.97	11.95	11.95	11.98	11.99	12.01	12.06	12.10	12.14	12.17
Transportation and warehousing	15.76	16.25	16.33	16.31	16.32	16.35	16.33	16.46	16.52	16.53	16.71	16.75	16.82	16.90	17.03
Utilities	23.96	24.76	24.99	24.96	25.17	25.36	25.13	25.32	25.35	25.38	25.67	25.46	25.44	25.66	25.48
Information	20.20	21.01	21.22	21.21	21.21	21.10	20.99	21.15	21.24	21.25	21.29	21.42	21.30	21.43	21.54
Financial activities	16.17	17.13	17.39	17.27	17.29	17.30	17.30	17.35	17.32	17.41	17.46	17.49	17.50	17.58	17.62
Professional and business services	16.81	17.20	17.20	17.19	17.25	17.29	17.25	17.24	17.25	17.27	17.29	17.36	17.42	17.46	17.60
Education and health services	15.21	15.64	15.69	15.70	15.73	15.77	15.81	15.87	15.90	15.96	15.99	16.06	16.12	16.19	16.21
Leisure and hospitality	8.58	8.76	8.77	8.78	8.78	8.82	8.84	8.85	8.86	8.87	8.86	8.86	8.85	8.88	8.90
Other services	13.72	13.84	13.82	13.81	13.80	13.81	13.80	13.84	13.84	13.87	13.84	13.85	13.88	13.90	13.92

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

p = preliminary.

NOTE: Data reflect the conversion to the 2002 version of the North American industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

15. Average hourly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry

Industry	Annual average		2003					2004							
	2002	2003	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
TOTAL PRIVATE	$14.95	$15.35	$15.31	$15.44	$15.42	$15.52	$15.48	$15.56	$15.60	$15.55	$15.59	$15.63	$15.57	$15.60	$15.70
Seasonally adjusted	15.18	15.47	15.41	15.41	15.41	15.43	15.45	15.49	15.52	15.55	15.59	15.63	15.66	15.72	15.77
GOODS-PRODUCING	16.33	16.8	16.92	17.01	16.95	16.98	17.03	16.94	16.95	17.00	17.09	17.10	17.14	17.18	17.27
Natural resources and mining	17.19	17.58	17.52	17.69	17.69	17.15	17.97	18.00	18.05	18.17	18.14	18.06	18.18	18.08	18.09
Construction	18.52	18.95	19.08	19.19	19.13	19.08	19.19	19.01	19.07	19.07	19.15	19.15	19.12	19.26	19.32
Manufacturing	15.29	15.74	15.76	15.87	15.81	15.92	16.05	15.98	15.99	16.01	16.07	16.05	16.09	16.04	16.16
Durable goods	16.02	16.46	16.48	16.62	16.55	16.64	16.78	16.66	16.68	16.69	16.72	16.71	16.75	16.61	16.83
Wood products	12.33	12.71	12.77	12.83	12.82	12.95	12.93	12.90	12.91	12.93	13.00	13.03	12.98	13.03	13.00
Nonmetallic mineral products	15.40	15.77	15.81	15.84	15.95	15.99	15.98	16.03	16.00	16.02	16.19	16.18	16.24	16.36	16.19
Primary metals	17.68	18.13	18.13	18.30	18.25	18.32	18.39	18.39	18.36	18.33	18.52	18.48	18.51	18.63	18.52
Fabricated metal products	14.68	15.01	15.04	15.09	15.03	15.06	15.23	15.20	15.18	15.25	15.21	15.20	15.23	15.26	15.25
Machinery	15.92	16.30	16.32	16.40	16.35	16.49	16.62	16.53	16.50	16.49	16.53	16.53	16.56	16.68	16.72
Computer and electronic products	16.20	16.68	16.81	16.77	16.77	16.78	16.85	16.81	16.92	16.93	17.01	17.11	17.21	17.35	17.44
Electrical equipment and appliances	13.98	14.35	14.45	14.49	14.37	14.54	14.68	14.50	14.58	14.68	14.80	14.83	14.88	14.88	15.03
Transportation equipment	20.64	21.25	21.29	21.56	21.35	21.48	21.74	21.38	21.37	21.34	21.36	21.29	21.36	20.76	21.44
Furniture and related products	12.61	12.98	13.04	13.10	13.01	13.08	13.08	12.95	12.92	12.96	13.09	13.04	13.10	13.11	13.25
Miscellaneous manufacturing	12.91	13.30	13.27	13.42	13.47	13.53	13.60	13.68	13.75	13.78	13.70	13.76	13.81	13.89	13.87
Nondurable goods	14.15	14.63	14.65	14.73	14.67	14.80	14.88	14.89	14.88	14.90	15.01	14.98	15.03	15.14	15.10
Food manufacturing	12.55	12.80	12.80	12.90	12.77	12.91	12.95	12.91	12.87	12.89	12.96	12.94	13.00	13.04	12.95
Beverages and tobacco products	17.73	17.96	17.75	17.73	18.05	18.64	18.58	18.88	18.76	19.13	19.60	19.55	19.39	19.30	19.05
Textile mills	11.73	12.00	11.95	12.07	12.02	12.08	12.21	12.11	12.13	12.09	12.23	12.08	12.15	12.06	12.09
Textile product mills	10.96	11.24	11.46	11.47	11.37	11.35	11.44	11.45	11.40	11.37	11.33	11.30	11.29	11.49	11.44
Apparel	9.10	9.56	9.75	9.77	9.69	9.71	9.80	9.74	9.58	9.60	9.71	9.55	9.60	9.76	9.71
Leather and allied products	11.00	11.67	11.67	11.63	11.83	11.87	11.90	11.94	11.76	11.64	11.65	11.49	11.59	11.68	11.71
Paper and paper products	16.85	17.32	17.33	17.41	17.44	17.58	17.60	17.63	17.55	17.59	17.84	17.88	17.86	17.91	17.79
Printing and related support activities	14.93	15.37	15.36	15.46	15.41	15.48	15.56	15.53	15.57	15.61	15.54	15.51	15.54	15.68	15.85
Petroleum and coal products	23.04	23.64	22.96	23.45	23.63	24.00	24.06	24.13	24.32	24.82	24.48	24.41	24.24	24.35	24.42
Chemicals	17.97	18.52	18.60	18.66	18.66	18.77	18.79	18.83	18.85	18.87	19.02	19.05	19.20	19.37	19.31
Plastics and rubber products	13.55	14.18	14.27	14.30	14.19	14.27	14.47	14.43	14.45	14.45	14.58	14.55	14.59	14.69	14.70
PRIVATE SERVICE-PROVIDING	14.56	14.96	14.88	15.00	15.01	15.13	15.07	15.19	15.24	15.16	15.20	15.24	15.14	15.18	15.27
Trade, transportation, and utilities	14.02	14.34	14.32	14.42	14.38	14.44	14.31	14.50	14.58	14.53	14.64	14.64	14.61	14.64	14.68
Wholesale trade	16.98	17.36	17.35	17.41	17.42	17.56	17.46	17.56	17.60	17.47	17.60	17.67	17.58	17.67	17.70
Retail trade	11.67	11.90	11.89	11.99	11.91	11.92	11.87	11.98	12.04	12.03	12.08	12.08	12.09	12.08	12.10
Transportation and warehousing	15.76	16.25	16.33	16.31	16.31	16.40	16.33	16.46	16.58	16.51	16.73	16.72	16.80	16.88	17.02
Utilities	23.96	24.76	24.81	25.15	25.23	25.50	25.26	25.38	25.29	25.36	25.69	25.53	25.33	25.61	25.28
	20.20	21.01	21.11	21.35	21.25	21.28	21.10	21.21	21.28	21.17	21.24	21.41	21.18	21.29	21.44
Financial activities	16.17	17.13	17.34	17.27	17.25	17.42	17.26	17.35	17.47	17.37	17.45	17.62	17.38	17.46	17.65
Professional and business services	16.81	17.20	17.00	17.11	17.13	17.41	17.29	17.38	17.47	17.28	17.26	17.45	17.28	17.33	17.51
Education and health services	15.21	15.64	15.68	15.71	15.73	15.79	15.86	15.94	15.95	15.94	15.99	16.00	16.06	16.19	16.18
Leisure and hospitality	8.58	8.76	8.68	8.78	8.78	8.83	8.94	8.89	8.92	8.89	8.84	8.85	8.78	8.79	8.82
Other services	13.72	13.84	13.75	13.82	13.78	13.85	13.88	13.89	13.90	13.85	13.87	13.90	13.90	13.80	13.88

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

16. Average weekly earnings of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry

Industry	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July[p]	Aug.[p]
TOTAL PRIVATE	$506.07	$517.36	$519.01	$520.33	$519.65	$527.68	$520.13	$518.15	$527.28	$520.93	$522.27	$531.42	$524.71	$528.84	$536.94
Seasonally adjusted	–	–	517.78	517.78	519.99	522.55	519.12	523.56	524.58	525.59	525.38	528.29	526.18	531.34	533.03
GOODS-PRODUCING	651.61	669.23	678.49	685.50	681.39	684.29	682.90	674.21	674.61	681.70	678.47	690.84	689.03	687.20	697.71
Natural resources and mining	741.97	766.83	772.63	780.13	778.36	784.55	781.70	784.80	786.98	797.66	794.53	798.25	809.01	802.75	806.81
Construction	711.82	727.11	753.66	752.25	744.16	730.76	714.34	712.88	711.31	732.29	721.96	741.11	738.03	754.99	755.41
Manufacturing	618.75	636.07	633.55	647.50	643.47	655.90	662.87	650.39	652.39	653.21	652.44	659.66	659.69	646.41	659.33
Durable goods	652.97	671.53	669.09	684.74	680.21	692.22	703.08	688.06	688.88	690.97	687.19	695.14	695.13	674.37	695.08
Wood products	492.00	513.92	519.74	526.03	525.62	537.43	531.42	517.29	521.56	524.96	530.40	544.65	533.48	531.62	536.90
Nonmetallic mineral products	646.91	665.11	675.09	676.37	679.47	681.17	669.56	663.64	664.00	680.85	684.84	684.41	690.20	695.30	692.93
Primary metals	749.32	767.63	754.21	777.75	771.98	785.93	799.97	796.29	787.64	790.02	800.06	803.88	808.89	791.78	801.92
Fabricated metal products	596.38	610.33	609.12	617.18	616.23	621.98	635.09	626.24	623.90	625.25	620.27	627.76	627.48	621.08	625.25
Machinery	645.55	664.79	660.96	672.40	667.08	682.69	696.38	689.30	691.35	690.93	987.65	700.87	698.83	692.22	693.88
Computer and electronic products	642.87	674.68	685.85	684.22	684.22	693.01	695.91	680.81	695.41	690.74	683.80	694.67	698.73	699.21	711.55
Electrical equipment and appliances	560.24	582.68	582.34	588.29	592.04	601.96	616.56	594.50	591.95	596.01	599.40	613.96	611.57	599.66	610.22
Transportation equipment	877.87	890.32	870.76	918.46	905.24	925.79	950.04	915.06	916.77	917.62	905.66	915.47	912.07	838.70	902.62
Furniture and related products	494.01	505.23	513.78	518.76	508.69	523.20	528.43	510.23	505.17	510.62	517.06	517.69	521.38	515.22	530.00
Miscellaneous manufacturing	499.13	510.69	505.59	515.33	515.90	530.38	533.12	532.15	533.50	534.66	524.71	535.26	530.30	529.21	532.61
Nondurable goods	566.84	582.65	581.61	593.62	588.27	600.88	602.64	594.11	595.20	596.00	595.90	602.20	604.21	602.57	607.02
Food manufacturing	496.91	502.61	506.88	517.29	505.69	515.11	514.12	504.78	499.36	498.84	497.66	511.13	512.20	512.47	511.53
Beverages and tobacco products	698.39	702.75	694.03	707.43	707.56	751.19	722.76	728.77	737.27	744.16	780.08	774.18	760.09	758.49	758.19
Textile mills	476.52	469.47	462.47	475.56	469.98	485.62	490.84	485.61	486.41	490.85	484.31	486.82	490.86	481.19	489.65
Textile product mills	429.01	445.08	459.55	467.98	458.21	456.27	464.46	447.70	450.30	441.16	435.07	436.18	444.83	436.62	446.16
Apparel	333.66	340.22	339.30	341.95	348.84	356.36	352.80	343.82	345.84	350.40	347.76	346.67	348.48	349.41	353.44
Leather and allied products	412.99	458.26	451.63	445.43	462.55	465.30	485.52	471.63	464.52	464.44	460.18	441.22	442.74	421.65	439.13
Paper and paper products	705.62	719.21	710.53	726.00	727.25	743.63	751.52	738.70	731.84	731.74	745.71	756.32	748.33	750.43	759.63
Printing and related support activities	573.05	587.42	585.22	599.85	597.91	603.72	602.17	593.25	597.89	600.99	593.63	594.03	593.63	600.54	610.23
Petroleum and coal products	990.88	1,052.97	1,007.94	1,045.87	1,068.08	1,099.20	1,061.05	1,068.96	1,074.94	1,079.67	1,062.43	1,091.13	1,095.65	1,120.10	1,135.53
Chemicals	759.53	784.56	784.92	793.05	785.59	808.99	806.09	804.04	816.21	811.41	814.06	815.34	819.84	817.41	824.54
Plastics and rubber products	549.85	572.23	572.23	583.44	578.95	586.50	596.16	585.86	588.12	589.56	594.86	595.10	599.65	583.19	589.47
PRIVATE SERVICE-PROVIDING	472.88	484.00	485.09	483.00	484.82	493.24	485.25	484.56	496.82	486.64	487.92	496.82	489.02	493.35	502.38
Trade, transportation, and utilities	471.27	481.10	485.45	485.95	483.17	486.63	480.82	477.05	488.43	482.40	486.05	493..37	489.44	494.83	500.59
Wholesale trade	644.38	657.12	659.30	658.10	661.96	676.06	659.99	656.74	670.56	658.62	665.28	674.99	661.01	666.16	674.37
Retail trade	360.81	367.28	373.35	371.69	366.83	365.94	367.97	361.80	368.42	365.71	367.23	372.06	372.37	376.90	379.94
Transportation and warehousing	579.75	597.79	604.21	606.73	603.47	615.00	602.58	597.50	613.46	604.27	610.65	627.00	621.60	626.25	641.65
Utilities	979.09	1,016.94	1,017.21	1,026.12	1,039.48	1,068.45	1,028.08	1,032.97	1,039.42	1,039.76	1,053.29	1,054.39	1,046.13	1,034.64	1,026.37
Information	738.17	761.13	768.40	770.74	769.25	783.10	761.71	763.56	776.72	760.00	764.64	777.18	775.19	772.83	788.99
Financial activities	575.51	608.87	613.84	607.90	608.93	628.86	607.55	612.10	630.67	611.42	615.99	637.84	613.51	618.08	637.17
Professional and business services	574.66	586.68	579.70	578.32	580.71	597.16	582.67	583.97	602.72	587.52	588.57	603.77	587.52	590.95	607.60
Education and health services	492.74	505.76	508.03	505.86	506.51	516.33	512.28	514.86	519.97	513.27	516.48	521.60	520.34	527.79	533.94
Leisure and hospitality	221.26	224.35	228.28	222.13	223.89	226.05	225.29	221.36	230.14	225.80	224.81	229.22	227.40	231.18	233.73
Other services	439.76	434.49	433.13	431.18	431.31	434.89	430.28	429.20	433.68	428.73	428.58	435.07	428.42	430.56	434.44

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

Dash indicates data not available. p = preliminary.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Private nonfarm payrolls, 278 industries											
Over 1-month span:												
2000	61.9	62.9	63.3	59.5	46.9	61.7	63.1	52.5	51.5	53.4	56.8	53.8
2001	52.2	47.8	50.4	34.4	41.4	39.2	37.1	38.8	38.3	32.4	36.7	34.9
2002	40.1	35.1	41.0	41.5	41.7	47.8	44.1	44.1	42.8	39.0	38.7	34.5
2003	41.2	35.1	38.1	41.4	42.8	40.1	40.5	39.7	49.3	46.0	51.1	49.1
2004	52.3	56.1	68.7	67.6	63.8	60.1	49.5					
Over 3-month span:												
2000	69.2	66.2	67.8	68.3	60.1	58.1	56.3	61.5	56.5	53.2	52.9	56.8
2001	52.7	50.4	50.4	43.5	38.8	34.9	36.2	37.9	34.7	35.3	30.8	32.0
2002	34.0	37.4	35.1	36.2	36.7	39.4	39.9	40.8	38.7	37.1	34.4	34.7
2003	36.5	32.6	36.3	35.1	40.5	42.6	37.4	35.4	40.1	45.5	50.5	51.1
2004	54.0	55.2	62.8	70.0	74.5	69.1	61.0					
Over 6-month span:												
2000	67.3	69.1	75.2	72.5	67.4	67.8	66.7	60.8	59.0	55.0	59.7	54.0
2001	51.8	50.0	51.8	47.3	43.5	41.5	38.1	35.4	32.2	33.1	31.5	31.1
2002	29.5	30.0	31.1	31.1	31.7	37.1	37.2	39.0	34.7	36.5	35.3	33.3
2003	33.6	31.1	31.7	31.7	33.5	37.8	36.2	36.5	40.5	39.4	42.6	41.7
2004	48.9	54.1	59.6	64.7	67.8	68.9	68.7					
Over 12-month span:												
2000	70.9	69.2	73.2	71.0	69.8	71.0	70.0	70.3	70.3	65.6	63.8	62.1
2001	59.5	59.5	53.4	49.3	48.6	45.0	43.3	43.9	39.9	37.8	37.1	34.9
2002	33.6	31.7	30.2	30.4	30.2	29.1	32.0	31.3	30.0	29.5	32.9	34.7
2003	34.5	31.5	32.9	33.5	36.2	34.4	34.7	33.1	37.6	37.4	33.1	35.4
2004	37.8	43.2	47.3	50.7	54.9	60.1	62.8					
	Manufacturing payrolls, 84 industries											
Over 1-month span:												
2000	48.2	58.3	50.0	50.0	41.1	57.1	60.7	28.6	25.0	35.1	39.9	41.1
2001	22.6	22.0	21.4	16.1	15.5	23.2	13.7	14.3	19.0	17.9	14.9	10.1
2002	21.4	18.5	23.8	35.1	29.8	32.7	40.5	28.0	31.0	11.9	15.5	17.9
2003	26.2	15.5	22.6	13.7	26.2	25.0	28.0	26.2	27.4	28.6	51.2	45.8
2004	42.9	55.4	60.1	66.1	64.9	51.2	54.2					
Over 3-month span:												
2000	53.6	53.6	56.0	54.8	44.0	44.0	51.2	47.6	32.7	25.0	23.2	38.7
2001	35.7	21.4	16.1	14.3	13.1	13.7	11.9	8.9	8.3	13.1	8.9	10.1
2002	9.5	10.1	11.3	17.9	17.3	19.0	28.0	22.0	23.8	15.5	6.5	4.8
2003	13.7	13.1	16.7	10.1	13.1	14.9	16.1	16.1	16.1	24.4	27.4	41.7
2004	48.8	51.8	59.5	66.1	71.4	65.5	60.1					
Over 6-month span:												
2000	44.0	52.4	55.4	57.7	47.6	51.8	56.0	45.2	39.3	34.5	32.1	27.4
2001	22.0	23.8	22.0	20.8	14.3	13.7	14.3	10.1	10.7	5.4	7.1	4.8
2002	6.5	8.9	7.7	8.3	7.7	14.3	14.9	10.7	12.5	10.1	8.9	8.9
2003	11.3	9.5	6.0	7.1	8.9	13.1	8.9	13.1	13.1	16.7	19.0	19.6
2004	28.6	36.9	46.4	56.5	61.3	61.9	66.7					
Over 12-month span:												
2000	41.7	39.3	47.0	50.0	46.4	52.4	51.8	49.4	46.4	40.5	35.1	33.3
2001	29.8	32.1	20.8	19.0	13.1	12.5	10.7	11.9	11.9	10.1	8.3	6.0
2002	7.1	6.0	6.0	6.5	7.1	3.6	4.8	6.0	4.8	7.1	4.8	8.3
2003	10.7	6.0	6.5	5.4	8.3	9.5	9.5	9.5	10.7	11.9	9.5	11.3
2004	9.5	19.0	16.7	26.2	29.8	38.7	50.0					

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment.

See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

Data for the two most recent months are preliminary.

18. Job openings levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Rates						
	2004							2004						
	Feb.	Mar.	Apr.	May	June	July	Aug.[P]	Feb.	Mar.	Apr.	May	June	July	Aug.[P]
Total[2]	2,906	3,079	3,135	3,105	3,022	3,237	3,191	2.2	2.3	2.3	2.3	2.3	2.4	2.4
Industry														
Total private[2]	2,534	2,740	2,778	2,746	2,640	2,894	2,854	2.3	2.5	2.5	2.4	2.3	2.6	2.5
Construction	99	113	105	108	94	88	118	1.4	1.6	1.5	1.5	1.3	1.3	1.7
Manufacturing	226	232	251	244	247	240	233	1.6	1.6	1.7	1.7	1.7	1.6	1.6
Trade, transportation, and utilities	458	524	531	521	503	567	537	1.8	2.0	2.0	2.0	1.9	2.2	2.1
Professional and business services	491	502	518	530	494	583	601	2.9	3.0	3.1	3.1	2.9	3.4	3.5
Education and health services	551	559	576	542	496	537	533	3.2	3.2	3.3	3.1	2.9	3.1	3.0
Leisure and hospitality	383	370	376	391	421	435	413	3.0	2.9	3.0	3.1	3.3	3.4	3.2
Government	364	353	354	360	380	343	340	1.7	1.6	1.6	1.6	1..7	1.6	1.6
Region[3]														
Northeast	500	569	560	526	546	545	545	2.0	2.2	2.2	2.0	2.1	2.1	2.1
South	1,112	1,176	1,191	1,164	1,164	1,280	1,290	2.4	2.5	2.5	2.5	2.4	2.7	2.7
Midwest	680	663	692	688	631	635	598	2.2	2.1	2.2	2.2	2.0	2.0	1.9
West	632	655	694	765	677	738	761	2.2	2.2	2.4	2.6	2.3	2.5	2.6

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah Washington, Wyoming.

NOTE: The job openings level is the number of job openings on the last business day o the month; the job openings rate is the number of job openings on the last business day o the month as a percent of total employment plus job openings.

[P] = preliminary.

19. Hires levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Rates						
	2004							2004						
	Feb.	Mar.	Apr.	May	June	July	Aug.[P]	Feb.	Mar.	Apr.	May	June	July	Aug.[P]
Total[2]	4,103	4,603	4,398	4,206	4,433	4,229	4,358	3.2	3.5	3.4	3.2	3.4	3.2	3.3
Industry														
Total private[2]	3,772	4,256	4,090	3,938	4,110	3,930	4,058	3.5	3.9	3.7	3.6	3.7	3.6	3.7
Construction	382	437	421	406	436	368	399	5.6	6.4	6.1	5.9	6.3	5.3	5.8
Manufacturing	355	361	354	336	370	352	339	2.5	2.5	2.5	2.3	2.6	2.4	2.4
Trade, transportation, and utilities	945	1,009	1,032	938	945	957	999	3.7	4.0	4.1	3.7	3.7	3.8	3.9
Professional and business services	529	713	609	631	692	621	693	3.3	4.4	3.7	3.8	4.2	3.8	4.2
Education and health services	447	444	460	451	428	418	478	2.7	2.6	2.7	2.7	2.5	2.5	2.8
Leisure and hospitality	766	810	766	739	749	760	741	6.3	6.6	6.2	6.0	6.1	6.2	6.0
Government	323	343	300	272	328	310	308	1.5	1.6	1.4	1.3	1.5	1.4	1.4
Region[3]														
Northeast	689	744	810	708	703	720	735	2.8	3.0	3.2	2.8	2.8	2.9	2.9
South	1,608	1,781	1,582	1,606	1,709	1,640	1,643	3.5	3.9	3.4	3.5	3.7	3.5	3.5
Midwest	953	1,040	991	956	1,009	935	955	3.1	3.4	3.2	3.1	3.2	3.0	3.1
West	876	1,029	1,093	951	1,023	685	1,020	3.1	3.6	3.8	3.3	3.6	3.0	3.6

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast**: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The hires level is the number of hires during the entire month; the hires rate is the number of hires during the entire month as a percent of total employment.

[P] = preliminary.

20. Total separations levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Rates						
	2004							2004						
	Feb.	Mar.	Apr.	May	June	July	Aug.[P]	Feb.	Mar.	Apr	May	June	July	Aug.[P]
Total[2]	4,073	4,134	4,088	4,040	4,069	4,074	4,060	3.1	3.2	3.1	3.1	3.1	3.1	3.1
Industry														
Total private[2]	3,807	3,868	3,843	3,761	3,789	3,793	3,843	3.5	3.5	3.5	3.4	3.5	3.5	3.5
Construction	400	392	391	367	382	364	394	5.9	5.7	5.7	5.3	5.5	5.3	5.7
Manufacturing	355	377	353	377	343	367	364	2.5	2.6	2.5	2.6	2.4	2.5	2.5
Trade, transportation, and utilities	899	978	1,013	917	927	972	952	3.5	3.8	4.0	3.6	3.6	3.8	3.7
Professional and business services	590	597	606	556	607	613	584	3.6	3.7	3.7	3.4	3.7	3.7	3.5
Education and health services	388	382	386	379	362	363	378	2.3	2.3	2.3	2.2	2.1	2.1	2.2
Leisure and hospitality	727	715	679	696	734	694	724	5.9	5.8	5.5	5.6	5.9	5.6	5.9
Government	268	284	245	268	270	273	225	1.2	1.3	1.1	1.2	1.3	1.3	1.0
Region[3]														
Northeast	688	666	716	648	704	674	717	2.8	2.7	2.9	2.6	2.8	2.7	2.8
South	1,499	1,612	1,524	1,504	1,533	1,545	1,500	3.3	3.5	3.3	3.2	3.3	3.3	3.2
Midwest	929	938	877	833	853	935	827	3.0	3.0	2.8	2.7	2.7	3.0	2.7
West	941	1,003	959	1,008	979	945	1,041	3.3	3.5	3.4	3.5	3.4	3.3	3.6

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The total separations level is the number of total separations during the entire month; the total separations rate is the number of total separations during the entire month as a percent of total employment.

[P] = preliminary.

21. Quits levels and rates by industry and region, seasonally adjusted

Industry and region	Levels[1] (in thousands)							Rates						
	2004							2004						
	Feb.	Mar.	Apr.	May	June	July	Aug.[P]	Feb.	Mar.	Apr.	May	June	July	Aug[P]
Total[2]	2,178	2,271	2,278	2,173	2,284	2,265	2,229	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Industry														
Total private[2]	2,051	2,144	2,151	2,026	2,162	2,141	2,122	1.9	2.0	2.0	1.9	2.0	2.0	1.9
Construction	133	154	149	144	156	101	144	2.0	2.3	2.2	2.1	2.3	1.5	2.1
Manufacturing	169	176	189	171	171	174	157	1.2	1.2	1.3	1.2	1.2	1.2	1.1
Trade, transportation, and utilities	493	530	563	525	536	559	552	1.9	2.1	2.2	2.1	2.1	2.2	2.2
Professional and business services	302	309	323	259	322	322	309	1.9	1.9	2.0	1.6	2.0	2.0	1.9
Education and health services	234	252	245	223	225	271	238	1.4	1.5	1.5	1.3	1.3	1.6	1.4
Leisure and hospitality	447	465	429	455	480	442	465	3.7	3.8	3.5	3.7	3.9	3.6	3.8
Government	126	129	129	129	123	126	111	.6	.6	.6	.6	.6	.6	.5
Region[3]														
Northeast	319	314	390	318	334	338	337	1.3	1.3	1.6	1.3	1.3	1.3	1.3
South	867	957	888	857	910	901	880	1.9	2.1	1.9	1.8	2.0	1.9	1.9
Midwest	455	474	479	479	485	505	453	1.5	1.5	1.5	1.5	1.6	1.6	1.5
West	520	565	524	521	573	519	552	1.8	2.0	1.8	1.8	2.0	1.8	1.9

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest**: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The quits level is the number of quits during the entire month; the quits rate is the number of quits during the entire month as a percent of total employment.

[P] = preliminary.

22. Quarterly Census of Employment and Wages: 10 largest counties, fourth quarter 2003.

County by NAICS supersector	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03[2]	Fourth quarter 2003	Percent change, fourth quarter 2002-03[2]
United States[3]	8,314.1	129,341.5	0.0	$767	3.6
Private industry	8,048.7	108,215.1	.0	769	3.9
Natural resources and mining	123.7	1,557.8	.1	703	4.9
Construction	804.9	6,689.5	1.2	837	2.3
Manufacturing	376.8	14,307.8	-4.2	943	6.7
Trade, transportation, and utilities	1,853.6	25,957.3	-.3	665	3.4
Information	145.2	3,165.9	-4.0	1,139	3.9
Financial activities	767.0	7,874.7	1.2	1,138	5.9
Professional and business services	1,329.4	16,113.2	.6	945	3.8
Education and health services	732.2	15,974.0	2.1	731	3.8
Leisure and hospitality	669.9	12,042.8	1.7	335	3.4
Other services	1,080.6	4,274.1	-.1	494	3.1
Government	265.3	21,126.3	-.2	757	2.4
Los Angeles, CA	356.0	4,075.3	-.5	903	4.2
Private industry	352.2	3,486.3	-.2	898	4.2
Natural resources and mining	.6	11.0	.7	955	16.9
Construction	12.9	133.9	-1.1	883	1.7
Manufacturing	17.8	485.2	-7.1	900	6.5
Trade, transportation, and utilities	53.9	794.6	-1.2	735	2.7
Information	9.2	194.9	-2.0	1,627	5.2
Financial activities	23.0	237.9	.9	1,258	7.0
Professional and business services	40.1	575.0	1.6	1,043	3.7
Education and health services	26.6	456.5	1.9	820	3.9
Leisure and hospitality	25.6	375.9	5.6	766	6.5
Other services	142.1	220.7	3.5	422	5.0
Government	3.8	589.0	-2.3	930	3.3
Cook, IL	126.7	2,539.8	-1.2	922	3.0
Private industry	125.5	2,221.9	-.9	929	3.2
Natural resources and mining	.1	1.3	-3.6	1,037	3.2
Construction	10.5	96.7	.0	1,169	-.8
Manufacturing	7.9	265.7	-5.1	975	6.3
Trade, transportation, and utilities	26.7	499.4	-.8	753	.4
Information	2.5	66.1	-4.1	1,164	.1
Financial activities	13.8	219.4	-.8	1,471	8.1
Professional and business services	26.1	405.5	-1.3	1,206	4.1
Education and health services	12.3	350.8	1.0	791	3.7
Leisure and hospitality	10.5	217.7	2.8	375	-.3
Other services	12.6	95.1	-2.0	655	3.0
Government	1.2	317.9	-3.1	871	.9
New York, NY	111.9	2,253.6	-1.0	1,480	7.2
Private industry	111.7	1,800.4	-.6	1,623	8.1
Natural resources and mining	.0	.1	.0	1,197	-6.5
Construction	2.2	30.0	-4.5	1,567	3.4
Manufacturing	3.5	46.6	-4.9	1,290	6.4
Trade, transportation, and utilities	22.1	247.6	-1.2	1,164	5.5
Information	4.3	130.6	-5.1	1,751	7.9
Financial activities	16.7	352.0	-2.0	3,034	16.1
Professional and business services	22.6	439.7	.5	1,702	2.6
Education and health services	7.8	273.8	2.4	918	7.6
Leisure and hospitality	10.1	188.2	.4	787	6.1
Other services	16.0	82.9	-1.1	871	6.1
Government	.2	453.2	-2.2	912	.1
Harris, TX	89.4	1,841.5	-.9	906	2.1
Private industry	89.0	1,595.2	-1.2	929	2.1
Natural resources and mining	1.2	62.5	8.7	2,185	-.9
Construction	6.3	135.5	-5.0	919	2.6
Manufacturing	4.7	164.0	-4.9	1,106	2.3
Trade, transportation, and utilities	21.1	403.2	-2.1	821	1.0
Information	1.4	33.8	-3.9	1,098	.4
Financial activities	9.7	113.1	1.7	1,181	4.9
Professional and business services	17.0	279.0	-1.7	1,073	3.2
Education and health services	8.8	188.3	1.5	812	1.8
Leisure and hospitality	6.5	155.2	.7	335	-.9
Other services	10.3	56.3	-3.1	539	.4
Government	.4	246.3	1.1	759	3.1
Maricopa, AZ	80.9	1,621.2	([4])	757	4.0
Private industry	80.5	1,401.8	2.2	755	3.9
Natural resources and mining	.5	9.8	-2.6	545	4.4
Construction	8.4	131.7	5.9	779	2.1
Manufacturing	3.3	128.0	-2.5	1,050	8.2
Trade, transportation, and utilities	18.6	336.4	1.5	712	3.2
Information	1.6	36.6	-4.1	872	.5
Financial activities	9.5	133.3	1.5	933	3.7
Professional and business services	18.1	261.5	4.2	776	3.5
Education and health services	7.6	160.5	5.6	842	5.0
Leisure and hospitality	5.6	155.8	.8	364	2.8
Other services	5.7	44.7	-2.6	500	2.2
Government	.5	219.4	1.6	766	3.7

See footnotes at end of table.

22. Continued—Quarterly Census of Employment and Wages: 10 largest counties, fourth quarter 2003.

County by NAICS supersector	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03[2]	Fourth quarter 2003	Percent change, fourth quarter 2002-03[2]
Dallas, TX	68.6	1,450.8	-1.4	$952	4.3
Private industry	68.2	1,294.6	-1.4	970	4.8
Natural resources and mining	.5	6.8	-20.5	2,680	22.7
Construction	4.5	73.0	-2.2	909	5.5
Manufacturing	3.5	144.9	-3.1	1,075	6.8
Trade, transportation, and utilities	15.8	326.1	-3.3	898	5.2
Information	1.9	64.0	-5.1	1,272	8.7
Financial activities	8.6	140.0	1.2	1,215	2.9
Professional and business services	14.0	237.7	.0	1,152	4.2
Education and health services	6.3	131.4	2.4	887	2.7
Leisure and hospitality	5.2	127.5	.0	432	4.3
Other services	6.7	40.5	-3.4	587	2.8
Government	.4	156.2	-1.8	800	-.1
Orange, CA	88.8	1,436.6	1.3	874	5.3
Private industry	87.4	1,305.5	2.1	875	5.2
Natural resources and mining	.3	6.1	8.3	579	.2
Construction	6.4	85.5	4.4	969	5.9
Manufacturing	6.1	179.9	-3.0	1,036	11.4
Trade, transportation, and utilities	17.3	278.8	.6	802	2.7
Information	1.5	33.8	-4.4	1,152	5.3
Financial activities	9.7	127.8	9.9	1,354	6.2
Professional and business services	17.4	261.0	1.0	942	2.8
Education and health services	9.1	126.6	6.1	849	3.7
Leisure and hospitality	6.6	159.9	2.5	358	3.8
Other services	12.9	46.0	6.3	518	3.0
Government	1.4	131.1	-5.7	859	6.0
San Diego, CA	85.3	1,278.2	1.3	815	2.6
Private industry	83.9	1,060.2	1.5	809	2.5
Natural resources and mining	.9	11.0	-5.4	491	1.0
Construction	6.4	81.1	4.7	869	.7
Manufacturing	3.6	105.4	-4.2	1,129	11.5
Trade, transportation, and utilities	14.2	220.4	2.2	655	.9
Information	1.4	36.7	-4.5	1,582	-2.0
Financial activities	8.8	81.6	4.8	1,058	.4
Professional and business services	14.9	208.1	1.5	989	2.8
Education and health services	7.6	122.6	1.6	778	5.7
Leisure and hospitality	6.5	141.5	3.5	346	2.4
Other services	19.5	51.6	1.8	449	2.7
Government	1.3	218.0	.1	843	2.9
King, WA	81.6	1,100.6	.2	935	.2
Private industry	81.0	945.5	.1	944	-.3
Natural resources and mining	.4	2.8	-11.3	1,109	.8
Construction	6.2	53.4	-.4	921	1.4
Manufacturing	2.7	101.9	-8.2	1,176	-2.1
Trade, transportation, and utilities	14.8	225.5	1.1	804	2.6
Information	1.5	69.2	.8	1,829	-15.7
Financial activities	6.1	77.5	2.4	1,114	3.5
Professional and business services	11.7	158.3	.7	1,160	8.4
Education and health services	5.9	108.3	1.5	746	4.8
Leisure and hospitality	5.4	100.5	2.9	390	3.7
Other services	26.4	48.1	1.2	463	.4
Government	.6	155.1	1.0	882	3.6
Miami-Dade, FL	80.2	980.8	-.5	765	3.5
Private industry	79.9	827.5	-.7	742	3.6
Natural resources and mining	.5	9.9	-1.8	421	4.0
Construction	4.9	40.7	.3	788	2.7
Manufacturing	2.8	49.4	-9.8	695	5.8
Trade, transportation, and utilities	23.2	247.2	-1.7	689	4.2
Information	1.7	28.5	-3.2	990	1.7
Financial activities	8.2	65.5	.7	1,062	-1.1
Professional and business services	15.9	132.0	-.2	948	5.2
Education and health services	7.8	123.4	1.4	748	2.3
Leisure and hospitality	5.3	92.8	2.1	432	9.9
Other services	7.5	34.5	-1.8	450	3.0
Government	.3	153.3	.5	886	2.8

[1] Average weekly wages were calculated using unrounded data.

[2] Percent changes were computed from quarterly employment and pay data adjusted for noneconomic county reclassifications. See Notes on Current Labor Statistics.

[3] Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

[4] Data do not meet BLS or State agency disclosure standards.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

23. Quarterly Census of Employment and Wages: by State, fourth quarter 2003.

State	Establishments, fourth quarter 2003 (thousands)	Employment		Average weekly wage[1]	
		December 2003 (thousands)	Percent change, December 2002-03	Fourth quarter 2003	Percent change, fourth quarter 2002-03
United States[2]	8,314.1	129,341.5	0.0	$767	3.6
Alabama	111.8	1,838.1	-.1	657	4.0
Alaska	20.0	282.7	1.1	746	1.1
Arizona	126.9	2,352.1	2.2	710	3.8
Arkansas	75.2	1,133.6	.5	587	4.1
California	1,190.8	14,922.3	.0	869	3.8
Colorado	160.0	2,134.6	-1.1	784	2.0
Connecticut	109.1	1,648.9	-.7	992	3.8
Delaware	27.1	408.4	.5	825	5.0
District of Columbia	30.0	654.8	-.4	1,238	3.9
Florida	504.1	7,424.5	.8	685	3.8
Georgia	245.6	3,845.6	.2	734	2.8
Hawaii	37.4	583.0	1.3	678	3.7
Idaho	48.5	577.5	.6	579	1.8
Illinois	325.7	5,738.7	-1.2	827	3.2
Indiana	152.1	2,852.2	-.3	675	3.5
Iowa	90.6	1,418.5	.0	626	4.7
Kansas	82.2	1,298.3	-.9	631	2.8
Kentucky	105.7	1,740.6	.3	645	3.5
Louisiana	114.0	1,870.9	.5	628	2.4
Maine	47.4	595.8	.7	631	4.6
Maryland	150.4	2,466.4	.7	831	3.6
Massachusetts	206.6	3,154.6	-1.9	954	5.2
Michigan	251.3	4,365.8	-1.1	806	3.9
Minnesota	159.0	2,591.9	-.5	777	3.2
Mississippi	65.6	1,108.1	.4	559	3.7
Missouri	165.4	2,633.6	-.7	676	2.4
Montana	42.0	396.6	1.1	549	4.0
Nebraska	55.3	884.4	.6	613	3.2
Nevada	60.3	1,111.2	4.4	721	5.1
New Hampshire	47.0	614.9	.6	788	4.0
New Jersey	268.1	3,912.8	.1	945	3.4
New Mexico	50.4	757.1	1.4	612	4.1
New York	550.3	8,379.2	-.4	959	5.2
North Carolina	227.8	3,759.6	-.1	679	4.5
North Dakota	24.0	317.6	.9	563	4.3
Ohio	294.2	5,322.4	-.7	713	3.8
Oklahoma	91.6	1,423.4	-1.3	597	4.2
Oregon	118.8	1,579.8	.2	694	3.3
Pennsylvania	326.9	5,524.5	-.2	750	4.7
Rhode Island	34.7	480.5	1.2	738	5.1
South Carolina	108.4	1,781.0	.3	623	3.1
South Dakota	28.1	365.4	.3	559	4.1
Tennessee	128.4	2,648.0	.4	689	4.2
Texas	505.3	9,300.1	-.3	754	3.1
Utah	73.9	1,066.2	1.2	630	2.3
Vermont	24.1	300.7	.3	661	5.1
Virginia	202.6	3,477.5	1.2	786	5.2
Washington	222.7	2,654.7	1.0	759	1.3
West Virginia	47.2	685.2	.1	587	2.1
Wisconsin	157.6	2,715.4	.0	683	4.1
Wyoming	22.0	241.6	1.7	616	4.1
Puerto Rico	50.2	1,074.1	3.5	450	4.7
Virgin Islands	3.2	42.5	-.2	629	2.4

[1] Average weekly wages were calculated using unrounded data.

[2] Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

24. Annual data: Quarterly Census of Employment and Wages, by ownership

Year	Average establishments	Average annual employment	Total annual wages (in thousands)	Average annual wage per employee	Average weekly wage
	Total covered (UI and UCFE)				
1993	6,679,934	109,422,571	$2,884,472,282	$26,361	$507
1994	6,826,677	112,611,287	3,033,676,678	26,939	518
1995	7,040,677	115,487,841	3,215,921,236	27,846	536
1996	7,189,168	117,963,132	3,414,514,808	28,946	557
1997	7,369,473	121,044,432	3,674,031,718	30,353	584
1998	7,634,018	124,183,549	3,967,072,423	31,945	614
1999	7,820,860	127,042,282	4,235,579,204	33,340	641
2000	7,879,116	129,877,063	4,587,708,584	35,323	679
2001	7,984,529	129,635,800	4,695,225,123	36,219	697
2002	8,101,872	128,233,919	4,714,374,741	36,764	707
	UI covered				
1993	6,632,221	106,351,431	$2,771,023,411	$26,055	$501
1994	6,778,300	109,588,189	2,918,684,128	26,633	512
1995	6,990,594	112,539,795	3,102,353,355	27,567	530
1996	7,137,644	115,081,246	3,298,045,286	28,658	551
1997	7,317,363	118,233,942	3,553,933,885	30,058	578
1998	7,586,767	121,400,660	3,845,494,089	31,676	609
1999	7,771,198	124,255,714	4,112,169,533	33,094	636
2000	7,828,861	127,005,574	4,454,966,824	35,077	675
2001	7,933,536	126,883,182	4,560,511,280	35,943	691
2002	8,051,117	125,475,293	4,570,787,218	36,428	701
	Private industry covered				
1993	6,454,381	91,202,971	$2,365,301,493	$25,934	$499
1994	6,596,158	94,146,344	2,494,458,555	26,496	510
1995	6,803,454	96,894,844	2,658,927,216	27,441	528
1996	6,946,858	99,268,446	2,837,334,217	28,582	550
1997	7,121,182	102,175,161	3,071,807,287	30,064	578
1998	7,381,518	105,082,368	3,337,621,699	31,762	611
1999	7,560,567	107,619,457	3,577,738,557	33,244	639
2000	7,622,274	110,015,333	3,887,626,769	35,337	680
2001	7,724,965	109,304,802	3,952,152,155	36,157	695
2002	7,839,903	107,577,281	3,930,767,025	36,539	703
	State government covered				
1993	59,185	4,088,075	$117,095,062	$28,643	$551
1994	60,686	4,162,944	122,879,977	29,518	568
1995	60,763	4,201,836	128,143,491	30,497	586
1996	62,146	4,191,726	131,605,800	31,397	604
1997	65,352	4,214,451	137,057,432	32,521	625
1998	67,347	4,240,779	142,512,445	33,605	646
1999	70,538	4,296,673	149,011,194	34,681	667
2000	65,096	4,370,160	158,618,365	36,296	698
2001	64,583	4,452,237	168,358,331	37,814	727
2002	64,447	4,485,071	175,866,492	39,212	754
	Local government covered				
1993	118,626	11,059,500	$288,594,697	$26,095	$502
1994	121,425	11,278,080	301,315,857	26,717	514
1995	126,342	11,442,238	315,252,346	27,552	530
1996	128,640	11,621,074	329,105,269	28,320	545
1997	130,829	11,844,330	345,069,166	29,134	560
1998	137,902	12,077,513	365,359,945	30,251	582
1999	140,093	12,339,584	385,419,781	31,234	601
2000	141,491	12,620,081	408,721,690	32,387	623
2001	143,989	13,126,143	440,000,795	33,521	645
2002	146,767	13,412,941	464,153,701	34,605	665
	Federal Government covered (UCFE)				
1993	47,714	3,071,140	$113,448,871	$36,940	$710
1994	48,377	3,023,098	114,992,550	38,038	731
1995	50,083	2,948,046	113,567,881	38,523	741
1996	51,524	2,881,887	116,469,523	40,414	777
1997	52,110	2,810,489	120,097,833	42,732	822
1998	47,252	2,782,888	121,578,334	43,688	840
1999	49,661	2,786,567	123,409,672	44,287	852
2000	50,256	2,871,489	132,741,760	46,228	889
2001	50,993	2,752,619	134,713,843	48,940	941
2002	50,755	2,758,627	143,587,523	52,050	1,001

NOTE: Detail may not add to totals due to rounding. Data reflect the movement of Indian Tribal Council establishments from private industry to the public sector. See Notes on Current Labor Statistics.

25. Annual data: Quarterly Census of Employment and Wages, establishment size and employment, private ownership, by supersector, first quarter 2003

Industry, establishments, and employment	Total	Size of establishments								
		Fewer than 5 workers[1]	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 or more workers
Total all industries[2]										
Establishments, first quarter	7,933,974	4,768,812	1,331,834	872,241	597,662	203,030	115,598	28,856	10,454	5,487
Employment, March	105,583,548	7,095,128	8,810,097	11,763,253	18,025,655	13,970,194	17,299,058	9,864,934	7,090,739	11,664,490
Natural resources and mining										
Establishments, first quarter	124,527	72,088	23,248	14,773	9,226	2,893	1,593	501	161	44
Employment, March	1,526,176	110,155	153,629	198,895	275,811	198,122	241,559	171,063	108,563	68,379
Construction										
Establishments, first quarter	795,029	523,747	129,201	76,215	46,096	12,837	5,604	1,006	262	61
Employment, March	6,285,841	746,296	846,521	1,021,722	1,371,071	872,274	823,846	338,107	172,944	93,060
Manufacturing										
Establishments, first quarter	381,159	148,469	65,027	57,354	54,261	25,927	19,813	6,506	2,565	1,237
Employment, March	14,606,928	252,443	436,028	788,581	1,685,563	1,815,385	3,043,444	2,245,183	1,732,368	2,607,933
Trade, transportation, and utilities										
Establishments, first quarter	1,851,662	992,180	378,157	239,637	149,960	51,507	31,351	6,681	1,619	570
Employment, March	24,683,356	1,646,304	2,514,548	3,204,840	4,527,709	3,564,316	4,661,898	2,277,121	1,070,141	1,216,479
Information										
Establishments, first quarter	147,062	84,906	20,744	16,130	13,539	5,920	3,773	1,223	575	252
Employment, March	3,208,667	112,409	138,076	220,618	416,670	410,513	576,674	418,113	399,366	516,228
Financial activities										
Establishments, first quarter	753,064	480,485	135,759	76,733	39,003	11,743	6,195	1,794	883	469
Employment, March	7,753,717	788,607	892,451	1,017,662	1,162,498	801,140	934,618	620,183	601,549	935,009
Professional and business services										
Establishments, first quarter	1,307,697	887,875	180,458	111,532	73,599	28,471	17,856	5,153	1,919	834
Employment, March	15,648,435	1,230,208	1,184,745	1,501,470	2,232,506	1,969,466	2,707,203	1,762,251	1,307,870	1,752,716
Education and health services										
Establishments, first quarter	720,207	338,139	164,622	103,683	65,173	24,086	17,122	3,929	1,761	1,692
Employment, March	15,680,834	629,968	1,092,329	1,392,099	1,955,861	1,679,708	2,558,300	1,337,188	1,220,921	3,814,460
Leisure and hospitality										
Establishments, first quarter	657,359	260,149	110,499	118,140	122,168	34,166	9,718	1,609	599	311
Employment, March	11,731,379	411,192	744,144	1,653,470	3,683,448	2,285,550	1,372,780	545,304	404,831	630,660
Other services										
Establishments, first quarter	1,057,236	851,231	116,940	56,238	24,235	5,451	2,561	454	109	17
Employment, March	4,243,633	1,037,360	761,518	740,752	703,957	371,774	376,832	150,421	71,453	29,566

[1] Includes establishments that reported no workers in March 2003.

[2] Includes data for unclassified establishments, not shown separately.

NOTE: Details may not add to totals due to rounding. Data are only produced for first quarter. Data are preliminary.

26. Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Metropolitan areas[3]	$37,908	$38,423	1.4
Abilene, TX	25,141	25,517	1.5
Akron, OH	32,930	34,037	3.4
Albany, GA	28,877	29,913	3.6
Albany-Schenectady-Troy, NY	35,355	35,994	1.8
Albuquerque, NM	31,667	32,475	2.6
Alexandria, LA	26,296	27,300	3.8
Allentown-Bethlehem-Easton, PA	33,569	34,789	3.6
Altoona, PA	26,869	27,360	1.8
Amarillo, TX	27,422	28,274	3.1
Anchorage, AK	37,998	39,112	2.9
Ann Arbor, MI	37,582	39,220	4.4
Anniston, AL	26,486	27,547	4.0
Appleton-Oshkosh-Neenah, WI	32,652	33,020	1.1
Asheville, NC	28,511	28,771	.9
Athens, GA	28,966	29,942	3.4
Atlanta, GA	40,559	41,123	1.4
Atlantic-Cape May, NJ	31,268	32,201	3.0
Auburn-Opelika, AL	25,753	26,405	2.5
Augusta-Aiken, GA-SC	30,626	31,743	3.6
Austin-San Marcos, TX	40,831	39,540	-3.2
Bakersfield, CA	30,106	31,192	3.6
Baltimore, MD	37,495	38,718	3.3
Bangor, ME	27,850	28,446	2.1
Barnstable-Yarmouth, MA	31,025	32,028	3.2
Baton Rouge, LA	30,321	31,366	3.4
Beaumont-Port Arthur, TX	31,798	32,577	2.4
Bellingham, WA	27,724	28,284	2.0
Benton Harbor, MI	31,140	32,627	4.8
Bergen-Passaic, NJ	44,701	45,185	1.1
Billings, MT	27,889	28,553	2.4
Biloxi-Gulfport-Pascagoula, MS	28,351	28,515	.6
Binghamton, NY	31,187	31,832	2.1
Birmingham, AL	34,519	35,940	4.1
Bismarck, ND	27,116	27,993	3.2
Bloomington, IN	28,013	28,855	3.0
Bloomington-Normal, IL	35,111	36,133	2.9
Boise City, ID	31,624	31,955	1.0
Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH	45,766	45,685	-.2
Boulder-Longmont, CO	44,310	44,037	-.6
Brazoria, TX	35,655	36,253	1.7
Bremerton, WA	31,525	33,775	7.1
Brownsville-Harlingen-San Benito, TX	22,142	22,892	3.4
Bryan-College Station, TX	25,755	26,051	1.1
Buffalo-Niagara Falls, NY	32,054	32,777	2.3
Burlington, VT	34,363	35,169	2.3
Canton-Massillon, OH	29,020	29,689	2.3
Casper, WY	28,264	28,886	2.2
Cedar Rapids, IA	34,649	34,730	.2
Champaign-Urbana, IL	30,488	31,995	4.9
Charleston-North Charleston, SC	28,887	29,993	3.8
Charleston, WV	31,530	32,136	1.9
Charlotte-Gastonia-Rock Hill, NC-SC	37,267	38,413	3.1
Charlottesville, VA	32,427	33,328	2.8
Chattanooga, TN-GA	29,981	30,631	2.2
Cheyenne, WY	27,579	28,827	4.5
Chicago, IL	42,685	43,239	1.3
Chico-Paradise, CA	26,499	27,190	2.6
Cincinnati, OH-KY-IN	36,050	37,168	3.1
Clarksville-Hopkinsville, TN-KY	25,567	26,940	5.4
Cleveland-Lorain-Elyria, OH	35,514	36,102	1.7
Colorado Springs, CO	34,391	34,681	.8
Columbia, MO	28,490	29,135	2.3
Columbia, SC	29,904	30,721	2.7
Columbus, GA-AL	28,412	29,207	2.8
Columbus, OH	35,028	36,144	3.2
Corpus Christi, TX	29,361	30,168	2.7
Corvallis, OR	35,525	36,766	3.5
Cumberland, MD-WV	25,504	26,704	4.7
Dallas, TX	42,706	43,000	.7
Danville, VA	25,465	26,116	2.6

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Davenport-Moline-Rock Island, IA-IL	$31,275	$32,118	2.7
Dayton-Springfield, OH	33,619	34,327	2.1
Daytona Beach, FL	25,953	26,898	3.6
Decatur, AL	30,891	30,370	-1.7
Decatur, IL	33,354	33,215	-.4
Denver, CO	42,351	42,133	-.5
Des Moines, IA	34,303	35,641	3.9
Detroit, MI	42,704	43,224	1.2
Dothan, AL	28,026	29,270	4.4
Dover, DE	27,754	29,818	7.4
Dubuque, IA	28,402	29,208	2.8
Duluth-Superior, MN-WI	29,415	30,581	4.0
Dutchess County, NY	38,748	38,221	-1.4
Eau Claire, WI	27,680	28,760	3.9
El Paso, TX	25,847	26,604	2.9
Elkhart-Goshen, IN	30,797	32,427	5.3
Elmira, NY	28,669	29,151	1.7
Enid, OK	24,836	25,507	2.7
Erie, PA	29,293	29,780	1.7
Eugene-Springfield, OR	28,983	29,427	1.5
Evansville-Henderson, IN-KY	31,042	31,977	3.0
Fargo-Moorhead, ND-MN	27,899	29,053	4.1
Fayetteville, NC	26,981	28,298	4.9
Fayetteville-Springdale-Rogers, AR	29,940	31,090	3.8
Flagstaff, AZ-UT	25,890	26,846	3.7
Flint, MI	35,995	36,507	1.4
Florence, AL	25,639	26,591	3.7
Florence, SC	28,800	29,563	2.6
Fort Collins-Loveland, CO	33,248	34,215	2.9
Fort Lauderdale, FL	33,966	34,475	1.5
Fort Myers-Cape Coral, FL	29,432	30,324	3.0
Fort Pierce-Port St. Lucie, FL	27,742	29,152	5.1
Fort Smith, AR-OK	26,755	27,075	1.2
Fort Walton Beach, FL	26,151	27,242	4.2
Fort Wayne, IN	31,400	32,053	2.1
Fort Worth-Arlington, TX	36,379	37,195	2.2
Fresno, CA	27,647	28,814	4.2
Gadsden, AL	25,760	26,214	1.8
Gainesville, FL	26,917	27,648	2.7
Galveston-Texas City, TX	31,067	31,920	2.7
Gary, IN	31,948	32,432	1.5
Glens Falls, NY	27,885	28,931	3.8
Goldsboro, NC	25,398	25,821	1.7
Grand Forks, ND-MN	24,959	25,710	3.0
Grand Junction, CO	27,426	28,331	3.3
Grand Rapids-Muskegon-Holland, MI	33,431	34,214	2.3
Great Falls, MT	24,211	25,035	3.4
Greeley, CO	30,066	31,104	3.5
Green Bay, WI	32,631	33,698	3.3
Greensboro–Winston-Salem–High Point, NC	31,730	32,369	2.0
Greenville, NC	28,289	29,055	2.7
Greenville-Spartanburg-Anderson, SC	30,940	31,726	2.5
Hagerstown, MD	29,020	30,034	3.5
Hamilton-Middletown, OH	32,325	32,985	2.0
Harrisburg-Lebanon-Carlisle, PA	33,408	34,497	3.3
Hartford, CT	43,880	44,387	1.2
Hattiesburg, MS	25,145	26,051	3.6
Hickory-Morganton-Lenoir, NC	27,305	27,996	2.5
Honolulu, HI	32,531	33,978	4.4
Houma, LA	30,343	30,758	1.4
Houston, TX	42,784	42,712	-.2
Huntington-Ashland, WV-KY-OH	27,478	28,321	3.1
Huntsville, AL	36,727	38,571	5.0
Indianapolis, IN	35,989	36,608	1.7
Iowa City, IA	31,663	32,567	2.9
Jackson, MI	32,454	33,251	2.5
Jackson, MS	29,813	30,537	2.4
Jackson, TN	29,414	30,443	3.5
Jacksonville, FL	32,367	33,722	4.2
Jacksonville, NC	21,395	22,269	4.1

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Jamestown, NY	$25,913	$26,430	2.0
Janesville-Beloit, WI	31,482	32,837	4.3
Jersey City, NJ	47,638	49,562	4.0
Johnson City-Kingsport-Bristol, TN-VA	28,543	29,076	1.9
Johnstown, PA	25,569	26,161	2.3
Jonesboro, AR	25,337	26,165	3.3
Joplin, MO	26,011	26,594	2.2
Kalamazoo-Battle Creek, MI	32,905	34,237	4.0
Kankakee, IL	29,104	30,015	3.1
Kansas City, MO-KS	35,794	36,731	2.6
Kenosha, WI	31,562	32,473	2.9
Killeen-Temple, TX	26,193	27,299	4.2
Knoxville, TN	30,422	31,338	3.0
Kokomo, IN	39,599	40,778	3.0
La Crosse, WI-MN	27,774	28,719	3.4
Lafayette, LA	29,693	30,104	1.4
Lafayette, IN	31,484	31,700	.7
Lake Charles, LA	29,782	30,346	1.9
Lakeland-Winter Haven, FL	28,890	29,505	2.1
Lancaster, PA	31,493	32,197	2.2
Lansing-East Lansing, MI	34,724	35,785	3.1
Laredo, TX	24,128	24,739	2.5
Las Cruces, NM	24,310	25,256	3.9
Las Vegas, NV-AZ	32,239	33,280	3.2
Lawrence, KS	25,923	26,621	2.7
Lawton, OK	24,812	25,392	2.3
Lewiston-Auburn, ME	27,092	28,435	5.0
Lexington, KY	31,593	32,776	3.7
Lima, OH	29,644	30,379	2.5
Lincoln, NE	29,352	30,614	4.3
Little Rock-North Little Rock, AR	30,858	31,634	2.5
Longview-Marshall, TX	28,029	28,172	.5
Los Angeles-Long Beach, CA	40,891	41,709	2.0
Louisville, KY-IN	33,058	33,901	2.6
Lubbock, TX	26,577	27,625	3.9
Lynchburg, VA	28,859	29,444	2.0
Macon, GA	30,595	31,884	4.2
Madison, WI	34,097	35,410	3.9
Mansfield, OH	28,808	30,104	4.5
McAllen-Edinburg-Mission, TX	22,313	23,179	3.9
Medford-Ashland, OR	27,224	28,098	3.2
Melbourne-Titusville-Palm Bay, FL	32,798	33,913	3.4
Memphis, TN-AR-MS	34,603	35,922	3.8
Merced, CA	25,479	26,771	5.1
Miami, FL	34,524	35,694	3.4
Middlesex-Somerset-Hunterdon, NJ	49,950	50,457	1.0
Milwaukee-Waukesha, WI	35,617	36,523	2.5
Minneapolis-St. Paul, MN-WI	40,868	41,722	2.1
Missoula, MT	26,181	27,249	4.1
Mobile, AL	28,129	28,742	2.2
Modesto, CA	29,591	30,769	4.0
Monmouth-Ocean, NJ	37,056	37,710	1.8
Monroe, LA	26,578	27,614	3.9
Montgomery, AL	29,150	30,525	4.7
Muncie, IN	28,374	29,017	2.3
Myrtle Beach, SC	24,029	24,672	2.7
Naples, FL	30,839	31,507	2.2
Nashville, TN	33,989	35,036	3.1
Nassau-Suffolk, NY	39,662	40,396	1.9
New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	52,198	51,170	-2.0
New London-Norwich, CT	38,505	38,650	.4
New Orleans, LA	31,089	32,407	4.2
New York, NY	59,097	57,708	-2.4
Newark, NJ	47,715	48,781	2.2
Newburgh, NY-PA	29,827	30,920	3.7
Norfolk-Virginia Beach-Newport News, VA-NC	29,875	30,823	3.2
Oakland, CA	45,920	46,877	2.1
Ocala, FL	26,012	26,628	2.4
Odessa-Midland, TX	31,278	31,295	.1
Oklahoma City, OK	28,915	29,850	3.2

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Olympia, WA	$32,772	$33,765	3.0
Omaha, NE-IA	31,856	33,107	3.9
Orange County, CA	40,252	41,219	2.4
Orlando, FL	31,276	32,461	3.8
Owensboro, KY	27,306	28,196	3.3
Panama City, FL	26,433	27,448	3.8
Parkersburg-Marietta, WV-OH	27,920	29,529	5.8
Pensacola, FL	28,059	28,189	.5
Peoria-Pekin, IL	33,293	34,261	2.9
Philadelphia, PA-NJ	40,231	41,121	2.2
Phoenix-Mesa, AZ	35,514	36,045	1.5
Pine Bluff, AR	27,561	28,698	4.1
Pittsburgh, PA	35,024	35,625	1.7
Pittsfield, MA	31,561	32,707	3.6
Pocatello, ID	24,621	25,219	2.4
Portland, ME	32,327	33,309	3.0
Portland-Vancouver, OR-WA	37,285	37,650	1.0
Providence-Warwick-Pawtucket, RI	33,403	34,610	3.6
Provo-Orem, UT	28,266	28,416	.5
Pueblo, CO	27,097	27,763	2.5
Punta Gorda, FL	25,404	26,119	2.8
Racine, WI	33,319	34,368	3.1
Raleigh-Durham-Chapel Hill, NC	38,691	39,056	.9
Rapid City, SD	25,508	26,434	3.6
Reading, PA	32,807	33,912	3.4
Redding, CA	28,129	28,961	3.0
Reno, NV	34,231	34,744	1.5
Richland-Kennewick-Pasco, WA	33,370	35,174	5.4
Richmond-Petersburg, VA	35,879	36,751	2.4
Riverside-San Bernardino, CA	30,510	31,591	3.5
Roanoke, VA	30,330	31,775	4.8
Rochester, MN	37,753	39,036	3.4
Rochester, NY	34,327	34,827	1.5
Rockford, IL	32,104	32,827	2.3
Rocky Mount, NC	28,770	28,893	.4
Sacramento, CA	38,016	39,354	3.5
Saginaw-Bay City-Midland, MI	35,429	35,444	.0
St. Cloud, MN	28,263	29,535	4.5
St. Joseph, MO	27,734	28,507	2.8
St. Louis, MO-IL	35,928	36,712	2.2
Salem, OR	28,336	29,210	3.1
Salinas, CA	31,735	32,463	2.3
Salt Lake City-Ogden, UT	31,965	32,600	2.0
San Angelo, TX	26,147	26,321	.7
San Antonio, TX	30,650	31,336	2.2
San Diego, CA	38,418	39,305	2.3
San Francisco, CA	59,654	56,602	-5.1
San Jose, CA	65,931	63,056	-4.4
San Luis Obispo-Atascadero-Paso Robles, CA	29,092	29,981	3.1
Santa Barbara-Santa Maria-Lompoc, CA	33,626	34,382	2.2
Santa Cruz-Watsonville, CA	35,022	35,721	2.0
Santa Fe, NM	30,671	32,269	5.2
Santa Rosa, CA	36,145	36,494	1.0
Sarasota-Bradenton, FL	27,958	28,950	3.5
Savannah, GA	30,176	30,796	2.1
Scranton--Wilkes-Barre--Hazleton, PA	28,642	29,336	2.4
Seattle-Bellevue-Everett, WA	45,299	46,093	1.8
Sharon, PA	26,707	27,872	4.4
Sheboygan, WI	30,840	32,148	4.2
Sherman-Denison, TX	30,397	30,085	-1.0
Shreveport-Bossier City, LA	27,856	28,769	3.3
Sioux City, IA-NE	26,755	27,543	2.9
Sioux Falls, SD	28,962	29,975	3.5
South Bend, IN	30,769	31,821	3.4
Spokane, WA	29,310	30,037	2.5
Springfield, IL	36,061	37,336	3.5
Springfield, MO	27,338	27,987	2.4
Springfield, MA	32,801	33,972	3.6
State College, PA	29,939	30,910	3.2
Steubenville-Weirton, OH-WV	28,483	29,129	2.3

See footnotes at end of table.

26. Continued—Annual data: Quarterly Census of Employment and Wages, by metropolitan area, 2001-02

Metropolitan area[1]	Average annual wage[2]		
	2001	2002	Percent change, 2001-02
Stockton-Lodi, CA	$30,818	$31,958	3.7
Sumter, SC	24,450	24,982	2.2
Syracuse, NY	32,254	33,752	4.6
Tacoma, WA	31,261	32,507	4.0
Tallahassee, FL	29,708	30,895	4.0
Tampa-St. Petersburg-Clearwater, FL	31,678	32,458	2.5
Terre Haute, IN	27,334	28,415	4.0
Texarkana, TX-Texarkana, AR	26,492	27,717	4.6
Toledo, OH	32,299	33,513	3.8
Topeka, KS	30,513	31,707	3.9
Trenton, NJ	46,831	47,969	2.4
Tucson, AZ	30,690	31,673	3.2
Tulsa, OK	31,904	32,241	1.1
Tuscaloosa, AL	29,972	30,745	2.6
Tyler, TX	30,551	31,050	1.6
Utica-Rome, NY	27,777	28,500	2.6
Vallejo-Fairfield-Napa, CA	33,903	34,543	1.9
Ventura, CA	37,783	38,195	1.1
Victoria, TX	29,068	29,168	.3
Vineland-Millville-Bridgeton, NJ	32,571	33,625	3.2
Visalia-Tulare-Porterville, CA	24,732	25,650	3.7
Waco, TX	28,245	28,885	2.3
Washington, DC-MD-VA-WV	47,589	48,430	1.8
Waterloo-Cedar Falls, IA	29,119	29,916	2.7
Wausau, WI	29,402	30,292	3.0
West Palm Beach-Boca Raton, FL	35,957	36,550	1.6
Wheeling, WV-OH	26,282	26,693	1.6
Wichita, KS	32,983	33,429	1.4
Wichita Falls, TX	25,557	26,387	3.2
Williamsport, PA	27,801	27,988	.7
Wilmington-Newark, DE-MD	42,177	43,401	2.9
Wilmington, NC	29,287	29,157	-.4
Yakima, WA	24,204	24,934	3.0
Yolo, CA	35,352	35,591	.7
York, PA	31,936	32,609	2.1
Youngstown-Warren, OH	28,789	29,799	3.5
Yuba City, CA	27,781	28,967	4.3
Yuma, AZ	22,415	23,429	4.5
Aguadilla, PR	18,061	19,283	6.8
Arecibo, PR	16,600	18,063	8.8
Caguas, PR	18,655	19,706	5.6
Mayaguez, PR	17,101	17,500	2.3
Ponce, PR	17,397	18,187	4.5
San Juan-Bayamon, PR	20,948	21,930	4.7

[1] Includes data for Metropolitan Statistical Areas (MSA) and Primary Metropolitan Statistical Areas (PMSA) as defined by OMB Bulletin No. 99-04. In the New England areas, the New England County Metropolitan Area (NECMA) definitions were used.

[2] Each year's total is based on the MSA definition for the specific year. Annual changes include differences resulting from changes in MSA definitions.

[3] Totals do not include the six MSAs within Puerto Rico.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

27. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1993	1994[1]	1995	1996	1997[1]	1998[1]	1999[1]	2000[1]	2001	2002	2003
Civilian noninstitutional population	194,838	196,814	198,584	200,591	203,133	205,220	207,753	212,577	215,092	217,570	221,168
Civilian labor force	129,200	131,056	132,304	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510
Labor force participation rate	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2
Employed	120,259	123,060	124,900	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736
Employment-population ratio	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3
Unemployed	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774
Unemployment rate	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0
Not in the labor force	65,638	65,758	66,280	66,647	66,836	67,547	68,385	69,994	71,359	72,707	74,658

[1] Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

Industry	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total private employment	91,855	95,016	97,866	100,169	103,113	106,021	108,686	110,996	110,707	108,828	108,356
Total nonfarm employment	110,844	114,291	117,298	119,708	122,770	125,930	128,993	131,785	131,826	130,341	129,931
Goods-producing	22,219	22,774	23,156	23,410	23,886	24,354	24,465	24,649	23,873	22,557	21,817
Natural resources and mining	666	659	641	637	654	645	598	599	606	583	571
Construction	4,779	5,095	5,274	5,536	5,813	6,149	6,545	6,787	6,826	6,716	6,722
Manufacturing	16,744	17,021	17,241	17,237	17,419	17,560	17,322	17,263	16,441	15,259	14,525
Private service-providing	69,636	72,242	74,710	76,759	79,227	81,667	84,221	86,346	86,834	86,271	86,538
Trade, transportation, and utilities	22,378	23,128	23,834	24,239	24,700	25,186	25,771	26,225	25,983	25,497	25,275
Wholesale trade	5,093.2	5,247.3	5,433.1	5,522.0	5,663.9	5,795.2	5,892.5	5,933.2	5,772.7	5,652.3	5,605.6
Retail trade	13,020.5	13,490.8	13,896.7	14,142.5	14,388.9	14,609.3	14,970.1	15,279.8	15,238.6	15,025.1	14,911.5
Transportation and warehousing	3,553.8	3,701.0	3,837.8	3,935.3	4,026.5	4,168.0	4,300.3	4,410.3	4,372.0	4,223.6	4,176.7
Utilities	710.7	689.3	666.2	639.6	620.9	613.4	608.5	601.3	599.4	596.2	580.8
Information	2,668	2,738	2,843	2,940	3,084	3,218	3,419	3,631	3,629	3,395	3,198
Financial activities	6,709	6,867	6,827	6,969	7,178	7,462	7,648	7,687	7,807	7,847	7,974
Professional and business services	11,495	12,174	12,844	13,462	14,335	15,147	15,957	16,666	16,476	15,976	15,997
Education and health services	12,303	12,807	13,289	13,683	14,087	14,446	14,798	15,109	15,645	16,199	16,577
Leisure and hospitality	9,732	10,100	10,501	10,777	11,018	11,232	11,543	11,862	12,036	11,986	12,125
Other services	4,350	4,428	4,572	4,690	4,825	4,976	5,087	5,168	5,258	5,372	5,393
Government	18,989	19,275	19,432	19,539	19,664	19,909	20,307	20,790	21,118	21,513	21,575

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data. See "Notes on the data" for a description of the most recent benchmark revision.

29. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Private sector:											
Average weekly hours	34.3	34.5	34.3	34.3	34.5	34.5	34.3	34.3	34.0	33.9	33.7
Average hourly earnings (in dollars)	11.03	11.32	11.64	12.03	12.49	13.00	13.47	14.00	14.53	14.95	15.35
Average weekly earnings (in dollars)	378.40	390.73	399.53	412.74	431.25	448.04	462.49	480.41	493.20	506.07	517.36
Goods-producing:											
Average weekly hours	40.6	41.1	40.8	40.8	41.1	40.8	40.8	40.7	39.9	39.9	39.8
Average hourly earnings (in dollars)	12.28	12.63	12.96	13.38	13.82	14.23	14.71	15.27	15.78	16.33	16.80
Average weekly earnings (in dollars)	498.82	519.58	528.62	546.48	568.43	580.99	599.99	621.86	630.04	651.61	669.23
Natural resources and mining											
Average weekly hours	44.9	45.3	45.3	46.0	46.2	44.9	44.2	44.4	44.6	43.2	43.6
Average hourly earnings (in dollars)	14.12	14.41	14.78	15.10	15.57	16.20	16.33	16.55	17.00	17.19	17.58
Average weekly earnings (in dollars)	634.77	653.14	670.32	695.07	720.11	727.28	721.74	734.92	757.92	741.97	766.83
Construction:											
Average weekly hours	38.4	38.8	38.8	38.9	38.9	38.8	39.0	39.2	38.7	38.4	38.4
Average hourly earnings (in dollars)	14.04	14.38	14.73	15.11	15.67	16.23	16.80	17.48	18.00	18.52	18.95
Average weekly earnings (in dollars)	539.81	558.53	571.57	588.48	609.48	629.75	655.11	685.78	695.89	711.82	727.11
Manufacturing:											
Average weekly hours	41.1	41.7	41.3	41.3	41.7	41.4	41.4	41.3	40.3	40.5	40.4
Average hourly earnings (in dollars)	11.70	12.04	12.34	12.75	13.14	13.45	13.85	14.32	14.76	15.29	15.74
Average weekly earnings (in dollars)	480.80	502.12	509.26	526.55	548.22	557.12	573.17	590.65	595.19	618.75	636.07
Private service-providing:											
Average weekly hours	32.5	32.7	32.6	32.6	32.8	32.8	32.7	32.7	32.5	32.5	32.4
Average hourly earnings (in dollars)	10.60	10.87	11.19	11.57	12.05	12.59	13.07	13.60	14.16	14.56	14.96
Average weekly earnings (in dollars)	345.03	354.97	364.14	376.72	394.77	412.78	427.30	445.00	460.32	472.88	484.00
Trade, transportation, and utilities:											
Average weekly hours	34.1	34.3	34.1	34.1	34.3	34.2	33.9	33.8	33.5	33.6	33.6
Average hourly earnings (in dollars)	10.55	10.80	11.10	11.46	11.90	12.39	12.82	13.31	13.70	14.02	14.34
Average weekly earnings (in dollars)	359.33	370.38	378.79	390.64	407.57	423.30	434.31	449.88	459.53	471.27	481.10
Wholesale trade:											
Average weekly hours	38.5	38.8	38.6	38.6	38.8	38.6	38.6	38.8	38.4	38.0	37.8
Average hourly earnings (in dollars)	12.57	12.93	13.34	13.80	14.41	15.07	15.62	16.28	16.77	16.98	17.36
Average weekly earnings (in dollars)	484.46	501.17	515.14	533.29	559.39	582.21	602.77	631.40	643.45	644.38	657.12
Retail trade:											
Average weekly hours	30.7	30.9	30.8	30.7	30.9	30.9	30.8	30.7	30.7	30.9	30.9
Average hourly earnings (in dollars)	8.36	8.61	8.85	9.21	9.59	10.05	10.45	10.86	11.29	11.67	11.90
Average weekly earnings (in dollars)	484.46	501.17	515.14	533.29	559.39	582.21	602.77	631.40	643.45	644.38	657.12
Transportation and warehousing:											
Average weekly hours	38.9	39.5	38.9	39.1	39.4	38.7	37.6	37.4	36.7	36.8	36.8
Average hourly earnings (in dollars)	12.71	12.84	13.18	13.45	13.78	14.12	14.55	15.05	15.33	15.76	16.25
Average weekly earnings (in dollars)	494.36	507.27	513.37	525.60	542.55	546.86	547.97	562.31	562.70	579.75	597.79
Utilities:											
Average weekly hours	42.1	42.3	42.3	42.0	42.0	42.0	42.0	42.0	41.4	40.9	41.1
Average hourly earnings (in dollars)	17.95	18.66	19.19	19.78	20.59	21.48	22.03	22.75	23.58	23.96	24.76
Average weekly earnings (in dollars)	756.35	789.98	811.52	830.74	865.26	902.94	924.59	955.66	977.18	979.09	1,016.94
Information:											
Average weekly hours	36.0	36.0	36.0	36.4	36.3	36.6	36.7	36.8	36.9	36.5	36.2
Average hourly earnings (in dollars)	14.86	15.32	15.68	16.30	17.14	17.67	18.40	19.07	19.80	20.20	21.01
Average weekly earnings (in dollars)	535.25	551.28	564.98	592.68	622.40	646.52	675.32	700.89	731.11	738.17	761.13
Financial activities:											
Average weekly hours	35.5	35.5	35.5	35.5	35.7	36.0	35.8	35.9	35.8	35.6	35.5
Average hourly earnings (in dollars)	11.36	11.82	12.28	12.71	13.22	13.93	14.47	14.98	15.59	16.17	17.13
Average weekly earnings (in dollars)	403.02	419.20	436.12	451.49	472.37	500.95	517.57	537.37	558.02	575.51	608.87
Professional and business services:											
Average weekly hours	34.0	34.1	34.0	34.1	34.3	34.3	34.4	34.5	34.2	34.2	34.1
Average hourly earnings (in dollars)	11.96	12.15	12.53	13.00	13.57	14.27	14.85	15.52	16.33	16.81	17.20
Average weekly earnings (in dollars)	406.20	414.16	426.44	442.81	465.51	490.00	510.99	535.07	557.84	574.66	586.68
Education and health services:											
Average weekly hours	32.0	32.0	32.0	31.9	32.2	32.2	32.1	32.2	32.3	32.4	32.3
Average hourly earnings (in dollars)	11.21	11.50	11.80	12.17	12.56	13.00	13.44	13.95	14.64	15.21	15.64
Average weekly earnings (in dollars)	359.08	368.14	377.73	388.27	404.65	418.82	431.35	449.29	473.39	492.74	505.76
Leisure and hospitality:											
Average weekly hours	25.9	26.0	25.9	25.9	26.0	26.2	26.1	26.1	25.8	25.8	25.6
Average hourly earnings (in dollars)	6.32	6.46	6.62	6.82	7.13	7.48	7.76	8.11	8.35	8.58	8.76
Average weekly earnings (in dollars)	163.45	168.00	171.43	176.48	185.81	195.82	202.87	211.79	215.19	221.26	224.25
Other services:											
Average weekly hours	32.6	32.7	32.6	32.5	32.7	32.6	32.5	32.5	32.3	32.0	31.4
Average hourly earnings (in dollars)	9.90	10.18	10.51	10.85	11.29	11.79	12.26	12.73	13.27	13.72	13.84
Average weekly earnings (in dollars)	322.69	332.44	342.36	352.62	368.63	384.25	398.77	413.41	428.64	439.76	434.49

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.

30. Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Civilian workers[2]	159.9	161.3	162.2	164.5	165.8	167.6	168.4	170.7	172.2	0.9	3.9
Workers, by occupational group:											
White-collar workers	162.1	163.5	164.3	166.7	167.9	169.9	170.7	172.7	174.0	.8	3.6
Professional specialty and technical	159.3	161.4	162.4	164.1	165.0	167.0	168.0	170.2	171.2	.6	3.8
Executive, administrative, and managerial	165.6	166.3	166.7	171.1	172.0	174.0	174.9	175.8	177.1	.7	3.0
Administrative support, including clerical	163.3	164.9	166.1	168.3	170.0	171.7	172.5	175.3	177.2	1.1	4.2
Blue-collar workers	155.1	156.4	157.5	159.8	161.4	162.9	163.7	166.9	168.8	1.1	4.6
Service occupations	159.4	161.3	162.2	164.1	165.0	166.8	167.9	169.7	170.9	.7	3.6
Workers, by industry division:											
Goods-producing	157.7	158.7	169.2	163.1	164.6	165.8	166.8	170.4	171.9	.9	4.4
Manufacturing	158.1	159.1	160.5	164.0	165.4	166.5	167.1	171.7	173.2	.9	4.7
Service-producing	160.7	162.2	162.8	165.0	166.2	168.2	169.1	170.8	172.3	.9	3.7
Services	161.1	163.2	163.9	165.3	166.3	168.5	169.5	171.2	172.3	.6	3.6
Health services	161.8	163.1	164.5	166.4	167.6	169.3	170.7	173.0	174.4	.8	4.1
Hospitals	163.8	165.7	167.6	169.9	170.8	173.1	174.8	176.8	178.2	.8	4.3
Educational services	157.4	161.6	162.8	163.6	164.2	166.9	167.6	168.5	168.9	.2	2.9
Public administration[3]	157.5	160.2	161.7	163.4	164.3	167.3	168.1	170.1	171.4	.8	4.3
Nonmanufacturing	160.2	161.7	162.4	164.5	165.8	167.8	168.6	170.4	171.8	.8	3.6
Private industry workers	160.7	161.6	162.3	165.0	166.4	168.1	168.8	171.4	173.0	.9	4.0
Excluding sales occupations	160.5	161.6	162.4	165.1	166.6	168.1	169.0	171.6	173.2	.9	4.0
Workers, by occupational group:											
White-collar workers	163.8	164.6	165.2	168.1	169.4	171.2	172.0	174.2	175.7	.9	3.7
Excluding sales occupations	164.3	165.3	165.9	169.1	170.4	172.1	173.0	175.3	176.7	.8	3.7
Professional specialty and technical occupations	162.5	163.6	164.4	166.5	167.7	169.4	170.5	173.4	174.7	.7	4.2
Executive, administrative, and managerial occupations	166.6	167.0	167.2	172.1	173.1	175.0	175.9	176.8	178.1	.7	2.9
Sales occupations	161.6	161.6	161.9	163.5	165.1	167.2	167.1	169.2	171.2	1.2	3.7
Administrative support occupations, including clerical	164.2	165.6	166.7	169.0	170.9	172.3	173.2	176.1	178.1	1.1	4.2
Blue-collar workers	155.1	156.3	157.3	159.7	161.4	162.8	163.6	166.9	168.8	1.1	4.6
Precision production, craft, and repair occupations	155.7	156.9	157.8	160.0	162.0	163.1	164.2	167.1	169.1	1.2	4.4
Machine operators, assemblers, and inspectors	154.7	155.4	156.7	159.9	161.1	162.6	163.2	168.7	170.5	1.1	5.8
Transportation and material moving occupations	149.6	151.0	151.8	153.2	155.1	156.7	156.9	158.5	160.6	1.3	3.5
Handlers, equipment cleaners, helpers, and laborers	159.9	161.4	162.9	164.9	166.8	168.6	169.5	171.7	173.2	.9	3.8
Service occupations	157.4	159.0	159.8	161.7	162.6	163.8	164.3	166.9	168.2	.8	3.4
Production and nonsupervisory occupations[4]	158.7	159.7	160.5	162.6	164.1	165.7	166.6	169.3	171.0	1.0	4.2
Workers, by industry division:											
Goods-producing	157.6	158.6	160.1	163.0	164.5	165.7	166.5	170.3	171.8	.9	4.4
Excluding sales occupations	156.9	157.9	159.2	162.4	163.8	165.0	165.9	169.8	171.2	.8	4.5
White-collar occupations	161.9	162.9	164.3	167.8	169.2	170.1	170.5	173.5	174.7	.7	3.3
Excluding sales occupations	160.2	161.1	162.3	166.3	167.5	168.5	169.2	172.2	173.3	.6	3.5
Blue-collar occupations	154.8	155.9	157.3	159.9	161.5	162.9	163.9	168.1	169.8	1.0	5.1
Construction	155.2	156.3	157.9	159.1	161.1	162.3	163.3	164.6	165.9	.8	3.0
Manufacturing	158.1	159.1	160.5	164.0	165.4	166.5	167.1	171.7	173.2	.9	4.7
White-collar occupations	161.1	162.2	163.3	167.1	168.7	169.5	169.6	173.2	174.6	.8	3.5
Excluding sales occupations	158.6	159.6	160.7	165.1	166.4	167.4	167.8	171.3	172.6	.8	3.7
Blue-collar occupations	155.8	156.7	158.3	161.6	162.8	164.1	165.1	170.4	172.0	.9	5.7
Durables	158.3	158.9	160.6	164.4	165.5	166.6	167.3	172.4	174.0	.9	5.1
Nondurables	157.5	159.2	160.3	163.1	164.9	166.0	166.6	170.4	171.7	.8	4.1
Service-producing	161.8	162.7	163.1	165.6	167.0	168.8	169.7	171.6	173.3	1.0	3.8
Excluding sales occupations	162.4	163.5	164.0	166.6	168.0	169.7	170.6	172.5	174.2	1.0	3.7
White-collar occupations	164.0	164.7	165.1	167.9	169.2	171.2	172.0	174.1	175.7	.9	3.8
Excluding sales occupations	165.6	166.5	167.0	169.9	171.3	173.1	174.2	176.2	177.8	.9	3.8
Blue-collar occupations	155.2	156.6	156.9	158.7	160.8	162.2	162.6	164.1	166.4	1.4	3.5
Service occupations	157.0	158.5	159.3	161.1	162.0	163.2	164.3	166.1	167.4	.8	3.3
Transportation and public utilities	158.9	160.8	161.7	163.2	165.4	166.5	167.0	169.8	172.5	1.6	4.3
Transportation	153.9	155.4	156.1	157.8	158.9	159.4	159.6	162.0	164.7	1.7	3.7
Public utilities	165.5	168.2	169.2	170.5	174.2	176.4	177.0	180.4	183.1	1.5	5.1
Communications	166.1	169.0	170.1	171.3	175.5	178.4	179.0	182.2	183.6	.8	4.6
Electric, gas, and sanitary services	164.8	167.2	168.1	169.5	172.6	173.8	174.6	178.2	182.4	2.4	5.7
Wholesale and retail trade	159.5	159.6	159.7	161.3	162.5	164.3	165.0	166.3	168.1	1.1	3.4
Excluding sales occupations	160.0	160.3	160.4	161.8	162.7	165.0	165.9	167.4	168.6	.7	3.6
Wholesale trade	166.3	165.9	166.7	169.5	171.3	172.0	172.0	173.8	175.9	1.2	2.7
Excluding sales occupations	164.4	166.1	167.2	168.4	169.9	171.2	171.3	173.7	174.0	.2	2.4
Retail trade	155.6	156.0	155.8	156.6	157.4	159.9	161.0	162.1	163.7	1.0	4.0
General merchandise stores	154.2	156.1	155.1	156.4	159.2	161.2	165.6	165.8	166.2	.2	4.4
Food stores	154.5	156.3	156.3	157.5	158.6	159.3	160.3	162.1	163.5	.9	3.1

See footnotes at end of table.

30. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Finance, insurance, and real estate	167.3	168.0	168.5	176.7	178.3	180.2	180.9	182.5	183.6	0.6	3.0
Excluding sales occupations	171.3	172.1	173.1	182.0	184.0	1,853.0	186.1	186.6	188.7	1.1	2.6
Banking, savings and loan, and other credit agencies	184.2	184.6	185.3	204.3	206.3	207.6	209.0	207.2	208.9	.8	1.3
Insurance	166.1	167.1	167.9	172.1	173.9	175.1	176.2	177.8	180.5	1.5	3.8
Services	163.7	164.9	165.4	167.1	168.4	170.4	171.4	173.5	175.1	.9	4.0
Business services	166.6	167.2	167.5	168.5	169.2	171.9	172.6	174.8	176.9	1.2	4.6
Health services	162.0	163.2	164.4	166.5	167.9	169.4	170.8	173.3	174.8	.9	4.1
Hospitals	164.5	166.2	168.1	170.8	171.9	173.9	175.9	178.1	179.7	.9	4.5
Educational services	169.0	173.5	175.2	176.3	177.1	180.2	181.3	183.1	184.2	.6	4.0
Colleges and universities	168.4	172.0	173.7	174.5	175.4	178.4	179.4	181.2	182.5	.7	4.0
Nonmanufacturing	161.1	162.0	162.5	164.9	166.4	168.1	169.0	170.9	172.5	.9	3.7
White-collar workers	164.1	164.8	165.3	168.0	169.3	171.2	172.1	174.1	175.7	.9	3.8
Excluding sales occupations	165.7	166.6	167.1	170.0	171.4	173.2	174.2	176.2	177.7	.9	3.7
Blue-collar occupations	154.0	155.4	155.9	157.5	159.7	161.1	161.7	163.4	165.5	1.3	3.6
Service occupations	156.9	158.4	159.2	161.1	162.0	163.2	162.4	166.0	167.3	.8	3.3
State and local government workers	156.7	160.1	161.5	162.6	163.2	165.9	166.8	168.0	168.7	.4	3.4
Workers, by occupational group:											
White-collar workers	155.7	159.3	160.7	161.7	162.2	164.9	165.7	166.8	167.5	.4	3.3
Professional specialty and technical	154.1	158.1	159.4	160.2	160.8	163.4	164.1	165.1	165.6	.3	3.0
Executive, administrative, and managerial	159.6	162.3	163.8	165.3	165.7	168.0	169.1	170.1	171.0	.5	3.2
Administrative support, including clerical	158.0	161.0	162.4	163.8	164.4	167.9	168.5	170.4	171.8	.8	4.5
Blue-collar workers	154.7	158.4	159.8	161.3	161.7	163.6	165.2	166.7	167.5	.5	3.6
Workers, by industry division:											
Services	155.9	159.7	160.9	161.8	162.3	164.9	165.7	166.5	166.8	.2	2.8
Services excluding schools[5]	158.7	161.0	162.8	164.0	164.2	166.8	168.2	169.4	170.1	.4	3.6
Health services	161.4	163.5	165.5	166.4	166.7	169.5	171.0	172.2	172.9	.4	3.7
Hospitals	161.8	164.1	166.2	167.0	167.3	170.3	171.4	172.4	173.2	.5	3.5
Educational services	155.1	159.2	160.3	161.1	161.7	164.3	165.0	165.7	165.9	.1	2.6
Schools	155.4	159.6	160.7	161.4	162.0	164.7	165.3	166.0	166.3	.2	2.7
Elementary and secondary	153.6	157.7	158.8	159.4	160.0	163.0	163.7	164.4	164.6	.1	2.9
Colleges and universities	160.4	164.7	165.8	167.0	167.5	169.2	170.0	170.7	171.0	.2	2.1
Public administration[3]	157.9	160.2	161.7	163.4	164.3	167.3	168.1	170.1	171.4	.8	4.3

[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

31. Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Civilian workers[1]	156.1	157.2	157.8	159.3	160.3	161.8	162.3	163.3	164.3	0.6	2.5
Workers, by occupational group:											
White-collar workers	158.4	159.6	160.1	161.9	162.9	164.5	165.1	166.1	167.1	.6	2.6
Professional specialty and technical	156.2	158.0	158.6	159.3	160.1	161.8	162.5	163.8	164.4	.4	2.7
Executive, administrative, and managerial	162.6	163.5	163.8	167.9	169.0	170.5	171.2	171.4	172.4	.6	2.0
Administrative support, including clerical	158.4	159.6	160.6	161.8	163.1	164.3	164.9	166.3	167.5	.7	2.7
Blue-collar workers	151.0	151.9	152.6	153.8	154.8	155.8	156.3	157.3	158.4	.7	2.3
Service occupations	155.1	156.2	156.9	158.0	158.7	159.8	160.6	161.2	161.9	.4	2.0
Workers, by industry division:											
Goods-producing	153.1	153.9	155.1	156.3	157.5	158.3	160.6	159.9	161.0	.7	2.2
Manufacturing	154.5	155.4	156.5	158.0	159.0	159.7	160.1	161.3	162.4	.7	2.1
Service-producing	157.2	156.4	158.8	160.5	161.4	163.0	163.6	164.6	165.5	.5	2.5
Services	158.8	160.7	161.1	161.9	162.8	164.7	165.4	166.5	167.4	.5	2.8
Health services	158.5	159.6	160.9	162.0	163.2	164.7	165.9	167.7	168.6	.5	3.3
Hospitals	158.6	160.3	162.2	163.5	164.4	166.3	167.7	169.0	169.9	.5	3.3
Educational services	155.6	159.3	160.1	160.4	160.7	162.7	163.2	163.6	163.8	.1	1.9
Public administration[2]	153.4	154.8	155.8	157.2	158.0	159.4	160.0	161.1	161.4	.2	2.2
Nonmanufacturing	156.4	157.5	158.0	159.6	160.5	162.1	162.7	163.7	164.6	.5	2.6
Private industry workers	156.3	157.0	157.5	159.3	160.4	161.7	162.3	163.4	164.5	.7	2.6
Excluding sales occupations	156.1	157.0	157.9	159.4	160.5	161.7	162.4	163.5	164.5	.6	2.5
Workers, by occupational group:											
White-collar workers	159.4	160.0	160.4	162.6	163.8	165.3	165.9	167.1	168.2	.7	2.7
Excluding sales occupations	160.0	169.8	160.8	163.6	164.8	166.2	167.0	168.1	169.2	.7	2.7
Professional specialty and technical occupations	157.4	158.2	158.5	159.5	160.5	162.1	163.0	164.7	165.5	.5	3.1
Executive, administrative, and managerial occupations	163.6	164.3	164.5	169.1	170.3	171.8	172.5	172.7	173.9	.7	2.1
Sales occupations	157.0	156.9	156.8	158.1	159.3	161.6	161.1	162.6	163.9	.8	2.9
Administrative support occupations, including clerical	159.2	160.3	161.3	162.6	164.0	165.1	165.7	167.2	168.6	.8	2.8
Blue-collar workers	150.9	151.7	152.4	153.6	154.6	155.6	156.1	157.2	158.3	.7	2.4
Precision production, craft, and repair occupations	151.0	151.8	152.3	153.4	154.7	155.5	156.2	157.1	158.3	.8	2.3
Machine operators, assemblers, and inspectors	151.6	152.0	153.2	154.7	155.3	156.8	156.9	158.6	159.8	.8	2.9
Transportation and material moving occupations	145.2	146.3	146.9	147.8	149.0	149.8	149.8	150.4	151.8	.9	1.9
Handlers, equipment cleaners, helpers, and laborers	155.1	156.0	157.2	158.4	159.0	159.9	160.6	161.8	162.7	.6	2.3
Service occupations	152.8	153.9	154.4	155.5	156.1	157.1	157.8	158.4	159.3	.6	2.0
Production and nonsupervisory occupations[3]	154.0	154.7	155.2	156.4	157.4	158.8	159.4	160.7	161.7	.6	2.7
Workers, by industry division:											
Goods-producing	153.1	153.9	155.0	156.3	157.4	158.3	158.7	159.9	160.9	.6	2.2
Excluding sales occupations	152.2	153.0	154.0	155.4	156.5	157.4	158.0	159.2	160.2	.6	2.4
White-collar occupations	156.6	157.9	158.6	160.0	161.4	161.9	162.1	163.2	164.5	.8	1.9
Excluding sales occupations	154.5	155.4	156.3	158.0	159.2	159.9	160.4	161.5	162.7	.7	2.2
Blue-collar occupations	150.7	151.5	152.6	153.8	154.8	155.9	156.4	157.7	158.6	.6	2.5
Construction	148.2	149.0	150.2	150.6	152.4	153.6	154.0	155.1	155.9	.5	2.3
Manufacturing	154.4	155.4	156.5	158.0	159.0	159.7	160.1	161.3	162.4	.7	2.1
White-collar occupations	156.6	157.7	158.6	160.1	161.6	162.0	162.1	163.3	164.7	.9	1.9
Excluding sales occupations	153.9	155.0	155.9	157.7	158.9	159.5	160.0	161.2	162.5	.8	2.3
Blue-collar occupations	152.8	153.5	154.7	156.3	156.9	157.9	158.5	159.8	160.6	.5	2.4
Durables	155.3	156.0	157.3	158.8	159.7	160.6	160.9	161.9	162.9	.6	2.0
Nondurables	153.1	154.4	155.2	156.6	157.8	158.3	158.7	160.4	161.6	.7	2.4
Service-producing	157.7	158.4	158.6	160.6	161.7	163.3	163.9	165.0	166.1	.7	2.7
Excluding sales occupations	158.5	159.3	159.6	161.7	162.8	164.2	165.0	166.0	167.1	.7	2.6
White-collar occupations	159.9	160.5	160.7	163.0	164.1	166.0	166.6	167.8	168.9	.7	2.9
Excluding sales occupations	161.6	162.5	162.8	165.3	166.5	168.2	169.0	170.2	171.2	.6	2.8
Blue-collar occupations	151.1	151.8	152.0	153.2	154.3	155.1	155.4	156.2	157.8	1.0	2.3
Service occupations	152.4	153.5	154.1	155.1	155.6	156.6	157.4	158.0	158.8	.5	2.1
Transportation and public utilities	152.1	153.4	154.1	154.8	155.6	156.0	156.5	157.6	159.1	1.0	2.2
Transportation	148.6	149.6	150.1	150.5	150.6	150.4	150.8	151.7	153.4	1.1	1.9
Public utilities	156.4	158.2	159.3	160.4	162.1	163.4	164.1	165.3	166.4	.7	2.7
Communications	157.1	159.6	160.7	161.9	163.4	165.4	165.9	167.0	167.5	.3	2.5
Electric, gas, and sanitary services	155.5	156.5	157.4	158.6	160.4	161.0	161.8	163.3	165.1	1.1	2.9
Wholesale and retail trade	155.7	155.5	155.5	156.7	157.5	159.2	159.5	160.3	161.6	.8	2.6
Excluding sales occupations	–	–	–	–	–	–	–	–	–	–	–
Wholesale trade	161.3	160.4	161.0	163.4	164.7	164.8	165.3	166.2	167.8	1.0	1.9
Excluding sales occupations	161.2	162.6	163.7	163.9	165.2	165.7	166.3	167.8	167.6	–0.1	1.5
Retail trade	152.7	152.9	152.7	153.1	153.8	156.3	156.5	157.3	158.4	.7	3.0
General merchandise stores	148.9	150.1	149.2	149.8	152.0	153.1	153.6	154.1	154.9	.5	1.9
Food stores	148.9	150.1	150.3	151.0	151.6	152.2	152.8	153.8	154.3	.3	1.8

See footnotes at end of table.

31. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Finance, insurance, and real estate	162.0	162.4	162.6	171.1	172.4	174.1	174.5	175.2	175.3	0.1	1.7
Excluding sales occupations	165.7	166.1	167.3	176.7	178.5	179.2	210.2	179.2	180.5	.7	1.1
Banking, savings and loan, and other credit agencies	182.8	182.7	183.9	206.4	208.7	209.1	164.5	206.7	207.6	.4	–.5
Insurance	158.6	159.6	159.1	161.6	163.0	163.9	164.5	165.1	167.2	1.3	2.6
Services	160.3	161.5	161.7	162.8	164.0	165.9	166.7	168.1	169.3	.7	3.2
Business services	164.0	164.6	164.8	165.6	166.4	169.1	169.8	171.0	172.7	1.0	3.8
Health services	158.4	159.9	160.7	161.9	163.2	164.6	135.8	167.8	168.8	.6	3.4
Hospitals	158.6	160.2	162.1	163.6	164.6	166.5	167.9	169.4	170.5	.6	3.6
Educational services	161.2	165.2	166.5	167.1	167.5	170.3	171.0	171.9	172.6	.4	2.9
Colleges and universities	159.9	163.1	164.3	164.4	165.1	167.6	168.4	169.5	170.0	.3	3.0
Nonmanufacturing	156.5	157.2	157.5	159.4	160.5	162.1	162.6	163.7	164.8	.7	2.7
White-collar workers	159.6	160.2	160.5	162.8	163.9	165.7	166.3	167.5	168.6	.7	2.9
Excluding sales occupations	161.3	162.1	162.5	164.9	166.1	167.7	168.5	169.7	170.7	.6	2.8
Blue-collar occupations	149.0	149.8	150.2	151.1	152.4	153.4	153.8	154.7	156.1	.9	2.4
Service occupations	152.3	153.4	154.0	155.0	155.5	156.5	157.3	157.9	158.7	.5	2.1
State and local government workers	156.7	160.1	161.5	162.6	163.2	165.9	166.8	168.0	168.7	.2	1.9
Workers, by occupational group:											
White-collar workers	154.4	157.4	158.4	158.9	159.2	161.0	161.5	162.1	162.4	.2	2.0
Professional specialty and technical	154.1	157.5	158.4	158.8	159.1	161.0	161.4	162.1	162.3	.1	2.0
Executive, administrative, and managerial	156.8	159.0	160.1	160.9	161.0	162.5	163.3	163.5	163.8	.2	1.7
Administrative support, including clerical	152.8	155.1	156.0	156.9	157.2	159.1	159.5	160.4	160.8	.2	2.3
Blue-collar workers	152.1	154.5	155.1	156.2	156.5	157.6	158.3	158.9	159.2	.2	1.7
Workers, by industry division:											
Services	155.0	158.4	159.2	159.5	159.8	161.6	162.1	162.6	162.7	.1	1.8
Services excluding schools[4]	157.3	159.1	160.3	161.4	161.8	163.2	164.5	165.1	165.6	.3	2.3
Health services	158.6	160.5	162.2	162.9	163.5	165.1	166.7	167.4	167.8	.2	2.6
Hospitals	158.8	160.6	162.5	163.1	163.8	165.5	166.7	167.4	167.9	.3	2.5
Educational services	154.5	158.1	158.9	159.1	159.3	161.2	161.6	162.0	162.1	.1	1.8
Schools	154.6	158.3	159.0	159.2	159.5	161.4	161.8	162.1	162.3	.1	1.8
Elementary and secondary	153.6	157.4	158.1	158.2	158.5	160.6	160.9	161.3	161.5	.1	1.9
Colleges and universities	157.3	160.7	161.6	162.1	162.1	163.5	164.0	164.3	164.4	.1	1.4
Public administration[2]	153.4	154.8	155.8	157.2	158.0	159.4	160.0	161.1	161.4	.2	2.2

[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

32. Employment Cost Index, benefits, private industry workers by occupation and industry group

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
Private industry workers	171.6	173.1	174.6	179.6	182.0	184.3	185.8	192.2	195.3	1.6	7.3
Workers, by occupational group:											
White-collar workers	176.1	177.2	178.5	183.6	185.5	187.7	189.2	194.4	197.4	1.5	6.4
Blue-collar workers	164.0	166.2	167.8	172.7	176.1	178.4	179.9	188.3	191.8	1.9	8.9
Workers, by industry division:											
Goods-producing	167.4	168.8	171.0	178.0	180.2	182.3	183.8	193.7	196.2	1.3	8.9
Service-producing	173.3	174.9	175.9	179.9	182.3	184.7	186.2	190.6	194.1	1.8	6.5
Manufacturing	165.5	166.8	168.9	176.9	179.0	181.1	182.3	194.4	196.9	1.3	10.0
Nonmanufacturing	173.5	175.2	176.3	180.3	182.8	185.1	186.7	190.9	194.3	1.8	6.3

33. Employment Cost Index, private nonfarm workers by bargaining status, region, and area size

[June 1989 = 100]

Series	2002			2003				2004		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 2004	
COMPENSATION											
Workers, by bargaining status[1]											
Union	156.3	158.1	159.5	162.1	164.1	165.7	166.8	171.4	173.9	1.5	6.0
Goods-producing	154.7	156.2	157.8	161.4	163.4	164.7	165.9	172.3	174.6	1.3	6.9
Service-producing	157.6	159.9	161.1	162.6	164.6	166.5	167.5	170.2	172.9	1.6	5.0
Manufacturing	154.6	155.9	157.9	162.3	163.8	165.0	166.3	175.0	177.0	1.1	8.1
Nonmanufacturing	156.6	158.8	159.9	161.4	163.7	165.5	166.5	168.8	171.6	1.7	4.8
Nonunion	161.4	162.5	162.8	165.4	166.8	168.4	169.1	171.3	172.7	.8	3.5
Goods-producing	158.6	159.5	160.8	163.6	164.9	166.1	166.7	169.7	170.9	.7	3.6
Service-producing	162.2	162.9	163.3	165.9	167.2	169.0	169.8	171.6	173.2	.9	3.6
Manufacturing	159.1	160.1	161.3	164.5	165.8	166.9	167.3	170.6	172.0	.8	3.7
Nonmanufacturing	161.7	162.4	162.9	165.4	166.7	168.5	139.3	171.1	172.6	.9	3.5
Workers, by region[1]											
Northeast	159.9	160.5	161.3	163.8	165.2	166.9	167.9	170.2	172.3	1.2	4.3
South	157.6	158.9	159.0	160.6	161.6	163.2	163.9	166.4	167.9	.9	3.9
Midwest (formerly North Central)	162.2	163.5	164.6	169.0	170.4	171.7	172.5	174.7	176.2	.9	3.4
West	162.9	163.8	165.0	167.3	169.5	171.4	172.2	175.3	176.8	.9	4.3
Workers, by area size[1]											
Metropolitan areas	160.9	161.8	162.5	165.2	166.6	168.3	169.1	171.5	173.1	.9	3.9
Other areas	158.5	160.0	169.8	163.5	165.0	166.1	166.9	170.2	172.1	1.1	4.3
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	149.8	151.3	152.5	153.3	154.3	155.3	156.2	157.2	158.7	1.0	2.9
Goods-producing	158.6	150.0	151.2	152.4	153.9	154.8	155.4	156.3	157.5	.8	2.3
Service-producing	151.4	152.9	154.1	154.6	155.1	156.3	157.3	158.5	160.3	1.1	3.4
Manufacturing	150.2	151.6	153.1	154.6	155.9	156.7	157.1	158.1	159.2	.7	2.1
Nonmanufacturing	149.6	151.1	152.1	152.5	153.5	154.6	155.6	156.6	158.4	1.1	3.2
Nonunion	157.5	158.1	158.5	160.4	161.5	163.0	163.4	164.6	165.6	.6	2.5
Goods-producing	154.8	155.5	156.6	157.8	158.9	159.7	160.1	161.4	162.4	.6	2.2
Service-producing	158.3	158.9	159.0	161.2	162.3	164.0	164.5	165.6	166.6	.6	2.6
Manufacturing	156.1	156.8	157.8	159.3	160.2	160.9	161.3	162.6	163.7	.7	2.2
Nonmanufacturing	157.5	158.1	158.3	160.4	161.5	163.1	163.7	164.7	165.7	.6	2.6
Workers, by region[1]											
Northeast	154.9	155.1	155.7	157.3	158.4	160.0	160.9	162.0	163.6	1.0	3.3
South	153.6	154.7	154.6	155.3	156.1	157.4	157.9	159.1	160.1	.6	2.6
Midwest (formerly North Central)	158.5	159.2	160.2	164.1	165.0	166.1	166.5	166.9	167.7	.5	1.6
West	158.7	159.3	160.1	161.3	163.1	164.7	165.2	166.8	167.9	.7	2.9
Workers, by area size[1]											
Metropolitan areas	156.7	157.4	157.9	159.6	160.7	162.2	162.7	163.8	164.9	.7	2.6
Other areas	152.6	153.8	154.8	156.8	158.0	158.9	159.5	160.8	162.1	.8	2.6

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the *Monthly Labor Review* Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

34. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, medium and large private establishments, selected years, 1980–97

Item	1980	1982	1984	1986	1988	1989	1991	1993	1995	1997
Scope of survey (in 000's)	21,352	21,043	21,013	21,303	31,059	32,428	31,163	28,728	33,374	38,409
Number of employees (in 000's):										
With medical care	20,711	20,412	20,383	20,238	27,953	29,834	25,865	23,519	25,546	29,340
With life insurance	20,498	20,201	20,172	20,451	28,574	30,482	29,293	26,175	29,078	33,495
With defined benefit plan	17,936	17,676	17,231	16,190	19,567	20,430	18,386	16,015	17,417	19,202
Time-off plans										
Participants with:										
Paid lunch time	10	9	9	10	11	10	8	9	–	–
Average minutes per day	–	25	26	27	29	26	30	29	–	–
Paid rest time	75	76	73	72	72	71	67	68	–	–
Average minutes per day	–	25	26	26	26	26	28	26	–	–
Paid funeral leave	–	–	–	88	85	84	80	83	80	81
Average days per occurrence	–	–	–	3.2	3.2	3.3	3.3	3.0	3.3	3.7
Paid holidays	99	99	99	99	96	97	92	91	89	89
Average days per year	10.1	10.0	9.8	10.0	9.4	9.2	10.2	9.4	9.1	9.3
Paid personal leave	20	24	23	25	24	22	21	21	22	20
Average days per year	–	3.8	3.6	3.7	3.3	3.1	3.3	3.1	3.3	3.5
Paid vacations	100	99	99	100	98	97	96	97	96	95
Paid sick leave [1]	62	67	67	70	69	68	67	65	58	56
Unpaid maternity leave	–	–	–	–	33	37	37	60	–	–
Unpaid paternity leave	–	–	–	–	16	18	26	53	–	–
Unpaid family leave	–	–	–	–	–	–	–	–	84	93
Insurance plans										
Participants in medical care plans	97	97	97	95	90	92	83	82	77	76
Percent of participants with coverage for:										
Home health care	–	–	46	66	76	75	81	86	78	85
Extended care facilities	58	62	62	70	79	80	80	82	73	78
Physical exam	–	–	8	18	28	28	30	42	56	63
Percent of participants with employee contribution required for:										
Self coverage	26	27	36	43	44	47	51	61	67	69
Average monthly contribution	–	–	$11.93	$12.80	$19.29	$25.31	$26.60	$31.55	$33.92	$39.14
Family coverage	46	51	58	63	64	66	69	76	78	80
Average monthly contribution	–	–	$35.93	$41.40	$60.07	$72.10	$96.97	$107.42	$118.33	$130.07
Participants in life insurance plans	96	96	96	96	92	94	94	91	87	87
Percent of participants with:										
Accidental death and dismemberment insurance	69	72	74	72	78	71	71	76	77	74
Survivor income benefits	–	–	–	10	8	7	6	5	7	6
Retiree protection available	–	64	64	59	49	42	44	41	37	33
Participants in long-term disability insurance plans	40	43	47	48	42	45	40	41	42	43
Participants in sickness and accident insurance plans	54	51	51	49	46	43	45	44	–	–
Participants in short-term disability plans [1]	–	–	–	–	–	–	–	–	53	55
Retirement plans										
Participants in defined benefit pension plans	84	84	82	76	63	63	59	56	52	50
Percent of participants with:										
Normal retirement prior to age 65	55	58	63	64	59	62	55	52	52	52
Early retirement available	98	97	97	98	98	97	98	95	96	95
Ad hoc pension increase in last 5 years	–	–	47	35	26	22	7	6	4	10
Terminal earnings formula	53	52	54	57	55	64	56	61	58	56
Benefit coordinated with Social Security	45	45	56	62	62	63	54	48	51	49
Participants in defined contribution plans	–	–	–	60	45	48	48	49	55	57
Participants in plans with tax-deferred savings arrangements	–	–	–	33	36	41	44	43	54	55
Other benefits										
Employees eligible for:										
Flexible benefits plans	–	–	–	2	5	9	10	12	12	13
Reimbursement accounts [2]	–	–	–	5	12	23	36	52	38	32
Premium conversion plans	–	–	–	–	–	–	–	–	5	7

[1] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1995 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-terms disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[2] Prior to 1995, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available.

35. Percent of full-time employees participating in employer-provided benefit plans, and in selected features within plans, small private establishments and State and local governments, 1987, 1990, 1992, 1994, and 1996

Item	Small private establishments				State and local governments			
	1990	1992	1994	1996	1987	1990	1992	1994
Scope of survey (in 000's)	32,466	34,360	35,910	39,816	10,321	12,972	12,466	12,907
Number of employees (in 000's):								
With medical care	22,402	24,396	23,536	25,599	9,599	12,064	11,219	11,192
With life insurance	20,778	21,990	21,955	24,635	8,773	11,415	11,095	11,194
With defined benefit plan	6,493	7,559	5,480	5,883	9,599	11,675	10,845	11,708
Time-off plans								
Participants with:								
Paid lunch time	8	9	–	–	17	11	10	–
Average minutes per day	37	37	–	–	34	36	34	–
Paid rest time	48	49	–	–	58	56	53	–
Average minutes per day	27	26	–	–	29	29	29	–
Paid funeral leave	47	50	50	51	56	63	65	62
Average days per occurrence	2.9	3.0	3.1	3.0	3.7	3.7	3.7	3.7
Paid holidays	84	82	82	80	81	74	75	73
Average days per year[1]	9.5	9.2	7.5	7.6	10.9	13.6	14.2	11.5
Paid personal leave	11	12	13	14	38	39	38	38
Average days per year	2.8	2.6	2.6	3.0	2.7	2.9	2.9	3.0
Paid vacations	88	88	88	86	72	67	67	66
Paid sick leave [2]	47	53	50	50	97	95	95	94
Unpaid leave	17	18	–	–	57	51	59	–
Unpaid paternity leave	8	7	–	–	30	33	44	–
Unpaid family leave	–	–	47	48	–	–	–	93
Insurance plans								
Participants in medical care plans	69	71	66	64	93	93	90	87
Percent of participants with coverage for:								
Home health care	79	80	–	–	76	82	87	84
Extended care facilities	83	84	–	–	78	79	84	81
Physical exam	26	28	–	–	36	36	47	55
Percent of participants with employee contribution required for:								
Self coverage	42	47	52	52	35	38	43	47
Average monthly contribution	$25.13	$36.51	$40.97	$42.63	$15.74	$25.53	$28.97	$30.20
Family coverage	67	73	76	75	71	65	72	71
Average monthly contribution	$109.34	$150.54	$159.63	$181.53	$71.89	$117.59	$139.23	$149.70
Participants in life insurance plans	64	64	61	62	85	88	89	87
Percent of participants with:								
Accidental death and dismemberment insurance	78	76	79	77	67	67	74	64
Survivor income benefits	1	1	2	1	1	1	1	2
Retiree protection available	19	25	20	13	55	45	46	46
Participants in long-term disability insurance plans	19	23	20	22	31	27	28	30
Participants in sickness and accident insurance plans	6	26	26	–	14	21	22	21
Participants in short-term disability plans [2]	–	–	–	29	–	–	–	–
Retirement plans								
Participants in defined benefit pension plans	20	22	15	15	93	90	87	91
Percent of participants with:								
Normal retirement prior to age 65	54	50	–	47	92	89	92	92
Early retirement available	95	95	–	92	90	88	89	87
Ad hoc pension increase in last 5 years	7	4	–	–	33	16	10	13
Terminal earnings formula	58	54	–	53	100	100	100	99
Benefit coordinated with Social Security	49	46	–	44	18	8	10	49
Participants in defined contribution plans	31	33	34	38	9	9	9	9
Participants in plans with tax-deferred savings arrangements	17	24	23	28	28	45	45	24
Other benefits								
Employees eligible for:								
Flexible benefits plans	1	2	3	4	5	5	5	5
Reimbursement accounts [3]	8	14	19	12	5	31	50	64
Premium conversion plans	–	–	–	7	–	–	–	–

[1] Methods used to calculate the average number of paid holidays were revised in 1994 to count partial days more precisely. Average holidays for 1994 are not comparable with those reported in 1990 and 1992.

[2] The definitions for paid sick leave and short-term disability (previously sickness and accident insurance) were changed for the 1996 survey. Paid sick leave now includes only plans that specify either a maximum number of days per year or unlimited days. Short-term disability now includes all insured, self-insured, and State-mandated plans available on a per-disability basis, as well as the unfunded per-disability plans previously reported as sick leave. Sickness and accident insurance, reported in years prior to this survey, included only insured, self-insured, and State-mandated plans providing per-disability benefits at less than full pay.

[3] Prior to 1996, reimbursement accounts included premium conversion plans, which specifically allow medical plan participants to pay required plan premiums with pretax dollars. Also, reimbursement accounts that were part of flexible benefit plans were tabulated separately.

NOTE: Dash indicates data not available

36. Work stoppages involving 1,000 workers or more

Measure	Annual totals		2003					2004[P]							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Number of stoppages:															
Beginning in period	19	14	3	0	5	0	0	0	1	1	0	2	3	0	2
In effect during period	20	15	3	2	5	3	2	1	2	1	1	2	4	1	2
Workers involved:															
Beginning in period (in thousands)	46	129.2	8.2	.0	82.2	8.0	.0	.0	6.5	2.2	.0	103.0	27.6	.0	3.7
In effect during period (in thousands)	47	130.5	8.2	3.2	82.2	76.7	70.5	61.3	66.5	2.2	2.2	103.0	28.6	1.6	3.7
Days idle:															
Number (in thousands)	6,596	4,091.2	35.9	51.3	1,168.5	1,219.0	1,473.4	1,203.9	1,146.5	44.0	26.4	204.0	94.0	3.2	52.5
Percent of estimated working time[1]	([2])	.01	([2])	.04	.04	.05	.05	.05	.05	.00	.00	.01	.00	.00	.00

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in "Total economy measures of strike idleness," *Monthly Labor Review*, October 1968, pp.54–56.

[2] Less than 0.005.

NOTE: Dash indicates data not available. P = preliminary.

37. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	179.9	184.0	184.6	185.2	185.0	184.5	184.3	185.2	186.2	187.4	188.0	189.1	189.7	189.4	189.5
All items (1967 = 100)	538.8	551.1	553.0	554.7	554.3	552.7	552.1	554.9	557.9	561.5	563.2	566.4	568.2	567.5	567.6
Food and beverages	176.8	180.5	180.9	181.3	182.2	182.9	184.7	184.3	184.5	184.9	185.0	186.5	186.8	187.2	187.3
Food	176.2	180.0	180.4	180.7	181.7	182.4	180.0	183.8	184.1	184.4	184.5	186.1	186.3	186.8	186.8
Food at home	175.6	179.4	179.7	180.1	181.5	182.4	184.1	184.0	184.0	184.3	184.1	186.6	186.8	187.1	186.7
Cereals and bakery products	198.0	202.8	204.5	203.5	203.1	202.5	202.9	203.9	204.4	204.8	205.5	206.1	206.8	207.2	207.2
Meats, poultry, fish, and eggs	162.1	169.3	169.7	171.1	174.0	179.3	181.1	179.9	179.7	179.5	179.2	181.1	182.3	183.7	183.7
Dairy and related products[1]	168.1	167.9	167.5	170.3	171.8	171.2	173.0	172.4	172.1	171.9	174.0	185.9	188.8	187.7	184.9
Fruits and vegetables	220.9	225.9	224.9	224.4	226.3	227.5	232.4	232.4	229.7	230.1	228.3	231.7	226.7	224.5	224.0
Nonalcoholic beverages and beverage materials	139.2	139.8	139.7	139.2	140.5	137.9	139.3	140.7	141.4	140.8	139.7	169.9	139.8	140.5	140.3
Other foods at home	160.8	162.6	163.2	163.1	163.0	162.0	163.0	162.8	163.7	165.1	165.0	165.4	165.8	166.0	166.2
Sugar and sweets	159.0	162.0	162.5	162.3	162.5	161.7	161.0	163.0	163.9	163.3	162.6	163.5	162.8	163.8	164.4
Fats and oils	155.4	157.4	157.7	157.6	159.7	157.3	157.7	160.7	162.3	166.2	166.2	169.4	171.3	171.9	169.7
Other foods	177.1	178.8	179.4	179.4	178.7	177.9	179.6	178.0	178.9	180.4	180.4	180.1	180.5	180.3	180.9
Other miscellaneous foods[1,2]	109.2	110.3	109.9	111.0	110.7	109.0	109.8	109.1	109.5	111.7	110.5	110.8	110.9	109.4	111.5
Food away from home[1]	178.3	182.1	182.6	182.8	183.3	183.8	184.3	184.9	185.5	185.8	186.2	186.7	187.0	187.8	188.4
Other food away from home[1,2]	117.7	121.3	121.4	121.8	122.3	122.7	122.9	123.9	124.0	124.1	124.7	124.8	124.8	125.1	125.4
Alcoholic beverages	183.6	187.2	187.1	187.9	188.1	188.6	188.7	189.4	189.9	190.8	191.8	191.7	192.4	192.2	192.5
Housing	180.3	184.8	186.1	185.8	185.7	185.1	185.1	186.3	187.0	187.9	188.4	188.9	190.3	190.9	191.2
Shelter	208.1	213.1	214.3	213.8	214.7	214.2	213.1	215.2	216.0	217.8	218.4	218.7	219.2	220.0	220.3
Rent of primary residence	199.7	205.5	206.1	206.6	206.9	207.5	205.5	208.3	208.8	209.2	209.7	210.2	210.7	211.2	211.9
Lodging away from home	118.3	119.3	125.1	118.5	120.9	115.0	119.3	117.2	120.0	128.1	129.1	128.2	129.1	132.2	130.6
Owners' equivalent rent of primary residence[3]	214.7	219.9	220.1	220.7	221.4	221.9	219.9	222.6	222.9	223.3	223.9	224.3	224.7	225.1	225.7
Tenants' and household insurance[1,2]	108.7	114.8	115.8	115.9	116.0	114.3	114.8	114.8	115.0	115.1	115.7	116.1	116.2	116.1	116.3
Fuels and utilities	143.6	154.5	159.2	159.6	155.0	152.9	154.5	156.3	156.9	155.2	155.6	158.1	165.5	166.6	167.7
Fuels	127.2	138.2	143.0	143.4	138.2	135.7	138.7	139.2	139.5	137.6	138.0	140.4	148.5	149.5	150.5
Fuel oil and other fuels	115.5	139.5	130.7	130.5	131.4	134.8	139.1	149.9	155.1	152.5	149.6	150.4	150.7	151.1	157.4
Gas (piped) and electricity	134.4	145.0	151.0	151.5	145.6	142.6	145.0	145.5	145.5	143.5	144.2	146.8	155.8	156.9	157.6
Household furnishings and operations	128.3	126.1	125.5	125.2	125.1	124.9	124.7	125.3	125.7	125.7	125.6	125.4	125.6	125.2	124.8
Apparel	124.0	120.9	117.2	122.0	124.8	123.1	119.0	115.8	118.6	123.5	124.3	123.4	120.1	115.9	116.5
Men's and boys' apparel	121.7	118.0	113.4	117.3	120.8	121.4	118.0	115.5	117.1	119.8	120.3	120.3	117.7	115.2	113.8
Women's and girls' apparel	115.8	113.1	107.9	115.5	118.8	115.7	110.9	105.7	110.3	117.6	118.7	116.9	112.3	106.1	107.5
Infants' and toddlers' apparel[1]	126.4	122.1	120.8	124.1	125.2	123.0	119.2	117.7	119.3	121.9	120.5	118.1	116.2	114.5	115.0
Footwear	121.4	119.6	117.8	120.3	121.8	121.0	118.5	115.9	117.0	120.1	121.0	120.3	118.4	115.1	117.3
Transportation	152.9	157.6	158.3	159.4	157.1	155.7	154.7	157.0	158.8	160.5	161.8	165.2	165.7	164.0	162.9
Private transportation	148.8	153.6	154.1	155.4	153.0	151.7	150.8	153.2	154.9	156.6	157.9	161.5	161.9	160.0	159.1
New and used motor vehicles[2]	99.2	96.5	96.0	95.1	94.6	94.6	94.4	94.3	94.4	94.2	94.1	94.0	93.6	93.5	93.4
New vehicles	140.0	137.9	136.8	136.4	136.5	137.5	138.0	138.0	138.3	137.9	137.6	137.4	137.2	135.9	134.9
Used cars and trucks[1]	152.0	142.9	143.3	139.0	135.1	132.0	131.0	130.8	131.0	131.2	131.3	131.8	130.6	132.1	133.8
Motor fuel	116.6	135.8	139.0	147.1	136.6	131.2	127.8	136.7	143.1	150.5	155.9	170.5	173.3	165.2	162.0
Gasoline (all types)	116.0	135.1	138.4	146.5	136.0	130.6	127.2	136.1	142.5	149.8	155.3	169.8	172.7	164.5	161.2
Motor vehicle parts and equipment	106.9	107.8	107.9	107.7	107.9	107.9	107.8	108.0	108.0	107.8	107.9	107.9	108.2	108.8	109.0
Motor vehicle maintenance and repair	190.2	195.6	195.7	196.2	196.9	197.2	198.0	198.2	198.2	198.5	198.6	199.0	199.7	200.3	200.8
Public transportation	207.4	209.3	213.8	211.2	211.3	207.9	205.6	206.3	208.1	209.9	211.5	210.7	212.3	214.4	209.7
Medical care	285.6	297.1	298.4	299.2	299.9	300.8	302.1	303.6	306.0	307.5	308.3	309.0	310.0	311.0	311.6
Medical care commodities	256.4	262.8	264.1	264.9	264.7	264.0	265.0	265.5	266.7	267.3	268.5	269.1	269.6	269.9	270.0
Medical care services	292.9	306.0	307.2	308.2	309.1	310.6	311.9	313.8	316.6	318.4	319.2	319.8	321.0	322.3	323.1
Professional services	253.9	261.2	261.7	262.2	263.0	263.0	261.2	262.5	268.0	269.7	270.6	270.9	271.6	272.3	273.3
Hospital and related services	367.8	394.8	398.6	399.6	400.7	405.6	407.0	409.7	412.5	413.8	413.6	414.6	416.9	419.1	418.8
Recreation[2]	106.2	107.5	107.7	107.7	107.6	107.8	107.7	107.9	108.4	108.8	109.0	108.8	108.9	108.7	108.5
Video and audio[1,2]	102.6	103.6	103.7	103.5	103.5	103.8	103.3	103.6	104.1	104.3	104.7	104.6	104.4	104.4	104.1
Education and communication[2]	107.9	109.8	110.1	110.9	110.9	110.8	110.9	111.1	111.2	111.1	110.9	110.6	110.8	110.9	111.7
Education[2]	126.0	134.4	136.2	138.7	139.1	139.0	139.4	140.1	140.4	140.6	140.7	140.9	141.6	142.1	145.1
Educational books and supplies	317.6	335.4	338.5	338.2	339.7	336.0	342.8	345.4	348.6	348.9	349.5	349.6	350.6	349.5	353.3
Tuition, other school fees, and child care	362.1	382.1	392.1	400.0	401.1	401.2	401.7	403.6	404.2	404.7	404.9	405.6	407.6	409.4	418.3
Communication[1,2]	92.3	89.7	89.0	88.6	88.4	88.2	88.2	88.1	88.1	87.7	87.4	86.9	86.8	86.5	86.1
Information and information processing[1,2]	90.8	87.8	87.0	86.7	86.4	86.2	86.2	86.1	86.1	85.7	85.4	84.8	84.7	84.5	84.0
Telephone services[1,2]	99.7	98.3	97.8	97.4	97.1	97.2	97.2	97.0	97.1	96.7	96.5	95.9	95.8	95.6	95.0
Information and information processing other than telephone services[1,4]	18.3	16.1	15.7	15.6	15.6	15.4	15.3	15.3	15.2	15.2	15.0	14.9	14.9	14.8	14.7
Personal computers and peripheral equipment[1,2]	22.2	17.6	16.7	16.3	16.5	16.3	16.2	16.2	16.0	15.8	15.9	15.7	15.5	15.3	15.1
Other goods and services	293.2	298.7	299.6	299.9	300.2	300.0	300.2	301.4	302.3	303.1	303.6	303.8	304.1	305.1	305.5
Tobacco and smoking products	461.5	469.0	471.8	468.7	469.5	469.1	470.4	473.0	472.6	473.6	473.3	473.5	476.0	480.5	481.6
Personal care[1]	174.7	178.0	178.4	179.0	179.1	179.0	179.0	179.7	180.4	180.9	181.3	181.4	181.4	181.7	181.9
Personal care products[1]	154.7	153.5	153.5	153.4	153.6	153.2	153.4	153.8	154.5	154.5	154.5	154.6	153.8	153.4	152.8
Personal care services[1]	188.4	193.2	193.9	195.4	195.6	194.2	194.3	194.6	195.2	195.8	196.1	196.6	196.9	197.5	198.9

See footnotes at end of table.

37. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Miscellaneous personal services	274.4	283.5	284.3	285.3	285.8	287.0	287.1	288.8	290.4	291.6	292.7	293.1	293.6	294.4	295.2
Commodity and service group:															
Commodities	149.7	151.2	150.9	152.0	151.4	150.9	150.4	151.1	152.3	153.7	154.3	156.0	155.8	154.5	154.2
Food and beverages	176.8	180.5	180.9	181.3	182.2	182.9	184.1	184.3	184.5	184.9	185.0	186.5	186.8	187.2	187.3
Commodities less food and beverages	134.2	134.5	133.9	135.4	134.1	132.9	131.7	132.6	134.2	136.0	136.9	138.6	138.2	136.1	135.6
Nondurables less food and beverages	145.1	149.7	149.2	153.1	151.2	149.0	146.7	148.4	151.4	155.3	157.2	160.9	160.5	156.7	156.1
Apparel	124.0	120.9	117.2	122.0	124.8	123.1	119.0	115.8	118.6	123.5	124.3	123.4	120.1	115.9	116.5
Nondurables less food, beverages, and apparel	162.2	171.5	173.0	176.4	171.6	169.1	167.7	172.3	175.6	179.1	181.7	188.2	189.5	185.8	184.4
Durables	121.4	117.5	116.7	115.7	115.2	115.1	115.0	115.1	115.3	115.1	115.0	114.8	114.5	114.1	113.7
Services	209.8	216.5	218.0	218.1	218.4	217.9	217.9	219.1	219.9	221.0	221.5	221.9	223.3	224.1	224.5
Rent of shelter[3]	216.7	221.9	223.1	222.6	223.5	223.0	222.9	224.1	224.9	226.8	227.4	227.7	228.3	229.2	229.4
Transporatation services	209.1	216.3	217.2	216.8	218.9	218.6	217.7	218.7	219.3	219.7	220.0	220.0	220.5	221.6	220.8
Other services	246.4	254.4	255.5	257.0	257.2	257.3	257.4	258.4	259.2	259.5	259.7	259.6	260.2	260.5	261.9
Special indexes:															
All items less food	180.5	184.7	185.3	186.0	185.6	184.9	184.4	185.5	186.6	188.0	188.6	189.6	190.3	189.9	189.9
All items less shelter	170.8	174.6	175.0	176.0	175.5	174.9	174.7	175.6	176.7	177.6	178.2	179.6	180.2	179.6	179.5
All items less medical care	174.3	178.1	178.7	179.2	179.1	178.5	178.2	179.1	180.1	181.3	181.8	182.9	183.5	183.2	183.2
Commodities less food	136.0	136.5	135.9	137.3	136.1	135.0	133.8	134.7	136.3	138.0	138.9	140.6	140.3	138.2	137.7
Nondurables less food	147.4	151.9	151.5	155.2	153.3	151.3	149.2	150.8	153.7	157.5	159.3	162.8	162.4	158.8	158.2
Nondurables less food and apparel	163.3	172.1	173.4	176.6	172.2	170.0	168.8	173.0	176.1	179.4	181.7	187.7	189.0	185.6	184.3
Nondurables	161.1	165.3	165.2	167.4	166.8	166.1	165.4	166.4	168.1	170.3	171.4	174.1	174.0	172.2	171.9
Services less rent of shelter[3]	217.5	226.4	228.4	229.2	228.7	228.2	228.4	229.7	230.6	230.7	231.1	231.7	234.2	235.0	235.6
Services less medical care services	202.5	208.7	210.3	210.3	210.5	209.9	209.9	211.0	211.7	212.7	213.2	213.6	215.0	215.8	216.2
Energy	121.7	136.5	140.6	144.6	136.9	133.1	131.8	137.4	140.6	143.1	145.9	154.1	159.7	156.3	155.3
All items less energy	187.7	190.6	190.8	191.0	191.7	191.6	191.5	191.9	192.7	193.7	194.1	194.3	194.4	194.5	194.7
All items less food and energy	190.5	193.2	193.5	193.6	194.3	193.9	193.6	194.0	194.9	196.1	196.5	196.5	196.6	196.6	196.8
Commodities less food and energy	143.7	140.9	139.7	140.2	140.4	139.9	139.0	138.5	139.3	140.3	140.5	140.2	139.4	138.2	138.1
Energy commodities	117.1	136.7	139.2	146.9	137.0	132.1	129.0	138.2	144.6	151.3	156.3	170.1	172.8	165.1	162.5
Services less energy	217.5	223.8	224.9	224.9	225.8	225.6	225.5	226.6	227.5	228.9	229.4	229.6	230.2	231.0	231.4
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	175.9	179.8	180.6	181.0	180.7	180.2	179.9	180.9	181.9	182.9	183.5	184.7	185.3	184.9	185.0
All items (1967 = 100)	523.9	535.6	537.1	539.2	538.2	536.7	536.0	538.7	541.7	544.8	546.5	550.2	551.9	550.8	551.0
Food and beverages	176.1	179.9	180.2	180.7	181.7	182.4	183.6	183.8	184.0	184.4	184.5	186.0	186.4	186.8	186.9
Food	176.5	179.4	179.7	180.2	181.2	181.9	183.1	183.3	183.5	183.8	183.9	185.6	185.9	186.3	186.4
Food at home	175.1	178.5	178.8	179.4	180.7	181.6	183.3	183.2	183.2	183.5	183.3	185.8	186.1	186.3	186.1
Cereals and bakery products	198.0	202.8	204.5	203.5	203.2	202.4	202.4	203.8	204.4	204.9	205.5	206.0	206.7	207.2	207.0
Meats, poultry, fish, and eggs	162.0	169.2	169.5	170.9	173.8	179.2	181.0	179.9	179.7	179.6	179.1	181.1	182.4	183.7	183.7
Dairy and related products[1]	167.2	167.6	167.0	170.2	171.7	171.0	172.7	172.2	171.7	171.3	173.6	186.1	189.0	187.8	184.9
Fruits and vegetables	222.9	224.3	223.8	223.4	224.9	225.3	229.7	229.7	227.5	227.8	225.5	228.9	224.3	222.3	222.2
Nonalcoholic beverages and beverage materials	138.6	139.1	138.9	138.5	139.8	137.3	138.6	140.0	140.8	140.1	139.1	139.3	139.3	139.8	139.6
Other foods at home	160.4	162.2	162.6	162.8	162.5	161.6	162.5	162.3	163.3	164.7	164.6	165.1	165.5	165.6	165.8
Sugar and sweets	158.8	161.6	162.1	162.1	162.1	161.4	160.5	162.4	163.2	162.6	161.9	162.9	162.2	162.9	163.8
Fats and oils	155.3	157.4	157.7	157.6	159.6	157.3	157.7	160.7	162.2	166.0	166.1	169.4	171.4	172.0	169.9
Other foods	177.6	179.2	179.7	180.0	179.0	178.3	180.0	178.4	179.4	180.8	180.8	180.5	180.8	180.7	181.4
Other miscellaneous foods[1,2]	109.7	110.8	110.0	111.3	111.2	109.5	110.3	109.6	110.1	112.2	111.0	111.2	111.4	109.7	112.0
Food away from home[1]	178.2	182.0	182.4	182.7	183.3	183.7	184.2	184.8	185.3	185.6	186.1	186.6	186.8	187.6	188.2
Other food away from home[1,2]	118.1	121.5	121.6	122.0	122.5	122.9	123.1	123.6	123.8	123.8	124.3	124.6	124.7	124.9	125.2
Alcoholic beverages	183.3	187.1	186.9	187.7	188.1	188.8	188.9	189.5	190.0	191.2	192.1	192.0	192.7	192.2	192.8
Housing	175.7	180.4	181.6	181.6	181.3	180.9	181.0	182.1	182.6	183.2	183.6	184.1	185.6	186.2	186.6
Shelter	201.9	206.9	207.7	207.6	208.3	208.2	208.2	209.2	209.8	211.0	211.5	211.8	212.2	213.0	213.4
Rent of primary residence	199.0	204.7	205.3	205.8	206.1	206.6	207.0	207.4	208.0	208.4	208.9	209.4	209.9	210.3	211.0
Lodging away from home[2]	118.4	119.8	125.2	119.8	121.7	116.2	113.4	118.5	121.1	128.8	129.8	128.2	128.8	133.0	131.6
Owners' equivalent rent of primary residence[3]	195.1	199.7	199.9	200.4	201.0	201.4	201.7	202.1	202.3	202.7	203.1	203.6	203.9	204.2	204.7
Tenants' and household insurance[1,2]	108.7	114.7	115.7	115.8	116.0	114.4	114.4	114.9	115.1	115.2	116.0	116.4	116.5	116.3	116.5
Fuels and utilities	142.9	153.9	158.7	159.1	154.3	152.3	153.0	155.6	156.2	154.7	155.1	157.4	165.0	166.1	167.2
Fuels	126.1	137.0	141.9	142.3	137.0	134.7	135.4	138.0	138.3	136.6	137.0	139.3	147.4	148.4	149.3
Fuel oil and other fuels	115.0	138.7	129.6	129.4	130.7	134.4	136.2	149.6	154.5	152.0	148.9	149.6	149.8	150.2	156.8
Gas (piped) and electricity	133.4	144.1	150.1	150.6	144.6	141.9	142.5	144.7	144.7	142.9	143.5	146.1	155.1	156.2	156.8
Household furnishings and operations	124.4	121.9	121.4	121.0	120.9	120.7	120.4	121.0	121.4	121.4	121.3	121.1	121.3	120.7	120.4
Apparel	123.1	120.0	116.1	121.0	123.9	122.6	118.7	115.7	118.3	122.9	123.8	122.8	119.6	115.6	115.9
Men's and boys' apparel	121.7	117.5	112.9	116.5	120.0	121.1	117.8	115.6	117.4	120.0	120.6	120.3	117.8	115.2	113.3
Women's and girls' apparel	114.6	112.1	106.9	114.5	118.2	115.3	110.5	105.5	109.8	117.4	118.4	116.7	112.2	106.0	106.9
Infants' and toddlers' apparel[1]	128.6	124.1	122.9	126.5	127.7	125.0	121.4	120.1	122.2	125.2	123.4	120.9	118.8	117.0	117.6
Footwear	121.2	119.1	117.2	119.6	121.1	120.4	117.8	115.6	116.4	118.6	119.6	119.0	117.0	114.4	116.3
Transportation	151.8	156.3	157.1	158.1	155.4	153.6	152.5	154.9	156.8	158.5	159.9	163.6	164.0	162.2	161.4
Private transportation	149.0	153.5	154.2	155.3	152.5	150.8	149.7	152.2	154.0	155.7	157.1	160.9	161.3	159.3	158.6
New and used motor vehicles[2]	99.4	96.0	95.7	94.4	93.5	93.1	92.8	92.7	92.8	92.6	92.6	92.5	92.1	92.1	92.2

See footnotes at end of table.

37. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
New vehicles	141.1	139.0	137.9	137.6	137.8	138.7	139.2	139.2	139.5	139.0	138.7	138.5	138.2	137.0	136.0
Used cars and trucks[1]	152.8	143.7	144.0	139.8	135.9	132.8	131.7	131.6	131.7	132.0	132.1	132.6	131.4	133.0	134.6
Motor fuel	117.0	136.1	139.4	147.5	136.9	131.5	128.1	137.1	143.6	150.9	156.5	171.1	173.8	165.6	162.4
Gasoline (all types)	116.4	135.5	138.9	147.0	136.4	130.9	127.6	136.6	143.0	150.3	155.8	170.4	173.2	165.0	161.7
Motor vehicle parts and equipment	106.1	107.3	107.3	107.2	107.5	107.5	107.3	107.6	107.6	107.4	107.5	107.5	107.8	108.2	108.4
Motor vehicle maintenance and repair	191.7	197.3	197.3	197.9	198.6	198.9	199.8	199.9	200.1	200.3	200.4	200.8	201.5	202.1	202.7
Public transportation	202.6	206.0	210.5	208.4	208.7	205.8	203.6	204.6	206.2	208.0	209.4	208.8	210.0	212.1	208.0
Medical care	284.6	296.3	297.4	298.3	299.1	300.1	301.4	302.8	305.4	306.9	307.7	308.4	309.4	310.4	311.0
Medical care commodities	251.1	257.4	258.6	259.4	259.2	258.5	259.4	259.8	260.9	261.5	262.5	263.3	263.8	263.7	263.8
Medical care services	292.5	305.9	307.0	307.9	309.1	310.6	311.9	313.8	316.8	318.6	319.4	320.0	321.2	322.4	323.2
Professional services	256.0	263.4	263.9	264.4	265.2	265.2	266.5	267.8	270.6	272.3	273.2	273.5	274.1	274.8	275.8
Hospital and related services	363.2	391.2	394.2	395.8	397.5	402.4	403.4	405.9	408.7	409.9	409.8	410.7	413.0	415.2	414.9
Recreation[2]	104.6	105.5	105.7	105.5	105.4	105.6	105.5	105.6	106.2	106.5	106.7	106.6	106.7	106.3	106.1
Video and audio[1,2]	102.0	102.9	102.9	102.7	102.8	103.0	102.5	102.7	103.2	103.5	103.9	103.9	103.7	103.7	103.4
Education and communication[2]	107.6	109.0	109.1	109.7	109.7	109.6	109.7	109.8	110.0	109.8	109.6	109.2	109.4	109.4	109.9
Education[2]	125.9	133.8	135.5	137.8	138.1	138.0	138.0	139.1	139.4	139.6	139.7	139.9	140.6	141.0	143.6
Educational books and supplies	318.5	336.5	339.6	339.6	340.6	337.5	343.8	346.1	349.5	349.9	350.4	350.4	351.5	350.4	354.7
Tuition, other school fees, and child care	354.8	377.3	382.1	389.2	390.1	390.2	390.7	392.8	393.3	393.8	394.1	394.6	396.7	398.1	405.8
Communication[1,2]	93.7	91.2	90.5	90.2	89.9	89.8	89.7	89.6	89.6	89.3	89.0	88..4	88.4	88.1	87.6
Information and information processing[1,2]	92.7	89.9	89.1	89.1	88.5	88.4	88.3	88.2	88.2	87.9	87.5	87.0	86.9	86.7	86.2
Telephone services[1,2]	99.9	98.5	98.0	97.6	97.3	97.4	97.4	97.2	97.3	96.9	96.7	96.1	96.1	95.8	95.2
Information and information processing other than telephone services[1,4]	19.0	16.7	16.3	16.1	16.2	15.9	15.8	15.8	15.8	15.7	15.5	15.4	15.4	15.3	15.3
Personal computers and peripheral equipment[1,2]	21.8	17.3	16.3	16.0	16.2	16.0	15.9	15.8	15.7	15.5	15.6	15.4	15.2	15.0	14.9
Other goods and services	302.0	307.0	308.0	307.9	308.2	307.7	308.1	309.3	310.0	310.8	311.3	311.5	311.8	313.2	313.5
Tobacco and smoking products	463.2	470.5	473.2	469.9	470.7	470.2	471.5	473.8	473.2	474.2	474.1	474.4	476.9	481.6	482.6
Personal care[1]	174.1	177.0	177.4	177.9	178.0	177.7	177.8	177.4	179.1	179.7	180.1	180.2	180.0	180.3	180.5
Personal care products[1]	155.5	154.2	154.3	154.0	154.1	153.8	154. 2	154.3	155.0	155.0	155.1	155.1	154.3	153.9	153.1
Personal care services[1]	189.1	193.9	194.6	196.1	196.3	194.8	194.9	195.1	195.7	196.3	196.6	197.1	197.5	198.1	199.5
Miscellaneous personal services	274.0	283.3	284.4	285.2	285.6	286.7	286.6	288.4	290.2	291.6	292.9	293.1	293.5	294.7	295.4
Commodity and service group:															
Commodities	150.4	151.8	151.6	152.7	151.9	151.3	150.7	151.5	152.7	154.1	154.8	156.7	156.6	155.2	154.9
Food and beverages	176.1	179.9	180.2	180.7	181.7	182.4	183.6	183.8	184.0	184.4	184.5	186.0	186.4	186.8	186.9
Commodities less food and beverages	135.5	135.8	135.4	136.7	135.2	133.8	132.5	133.5	135.2	137.0	138.0	140.0	139.6	137.5	137.1
Nondurables less food and beverages	147.0	152.1	151.7	155.9	153.6	151.4	149.0	151.0	154.3	158.4	160.5	164.7	164.4	160.4	159.5
Apparel	123.1	120.0	116.1	121.0	123.9	122.6	118.7	115.7	118.3	122.9	123.8	122.8	119.6	115.6	115.9
Nondurables less food, beverages, and apparel	165.3	175.6	177.4	181.2	175.7	172.9	171.6	176.5	180.2	184.1	187.0	194.5	196.0	191.8	190.2
Durables	121.8	117.4	116.9	115.5	114.7	114.2	114.0	114.0	1142.0	114.0	113.9	113.9	113.5	113.2	113.1
Services	205.9	212.6	214.0	214.3	214.4	214.1	214.2	215.3	216.0	216.7	217.1	217.6	219.0	219.7	220.2
Rent of shelter[3]	194.5	199.2	200.0	199.9	200.6	200.5	200.6	201.4	202.0	203.2	203.7	203.9	204.4	205.1	205.5
Transporatation services	207.7	216.2	216.8	216.8	219.0	218.8	218.0	219.1	219.7	220.0	220.2	220.3	220.7	221.6	221.0
Other services	241.6	248.5	249.3	250.6	250.7	250.7	250.9	251.8	252.6	252.9	253.0	252.7	253.3	253.5	254.4
Special indexes:															
All items less food	175.8	179.7	180.3	181.0	180.4	179.7	179.2	180.2	181.4	182.6	183.2	184.4	185.0	184.5	184.5
All items less shelter	168.3	171.9	172.3	173.3	172.6	171.9	171.6	172.5	173.7	174.7	175.3	176.8	177.5	176.7	176.6
All items less medical care	171.1	174.8	175.2	176.0	175.6	175.0	174.7	175.6	176.6	177.6	178.2	179.4	180.0	179.6	179.6
Commodities less food	137.3	137.7	137.2	138.6	137.0	135.8	134.5	135.5	137.1	138.9	139.9	141.8	141.5	139.4	139.0
Nondurables less food	149.2	154.2	151.0	157.9	155.7	153.7	151.4	153.3	156.4	160.4	162.4	166.4	166.2	162.3	161.5
Nondurables less food and apparel	166.1	175.9	177.5	181.1	176.1	173.6	172.1	176.9	180.2	184.0	186.6	193.5	194.8	191.0	189.6
Nondurables	161.4	166.4	166.4	168.8	168.1	167.3	166.6	167.8	169.5	171.8	173.0	175.9	175.9	174.0	173.6
Services less rent of shelter[3]	193.1	201.3	203.1	203.7	203.2	202.7	202.9	204.1	204.9	204.9	205.2	205.8	208.2	208.9	209.3
Services less medical care services	198.9	205.2	206.6	206.8	206.9	206.5	206.6	207.6	208.2	208.8	209.2	209.7	211.1	211.8	212.2
Energy	120.9	135.9	140.0	144.2	136.3	132.4	131.1	136.9	140.2	143.0	146.0	154.5	159.9	156.2	155.1
All items less energy	183.6	186.1	186.2	186.4	187.0	187.0	186.9	187.2	187.9	188.7	189.0	189.3	189.3	189.3	189.5
All items less food and energy	185.6	187.9	187.9	188.1	188.6	188.4	188.0	188.3	189.1	190.1	190.4	190.4	190.3	190.3	190.5
Commodities less food and energy	144.4	141.1	140.1	140.2	140.3	139.7	141.1	138.2	139.0	140.0	140.1	139.9	139.0	138.0	138.0
Energy commodities	17.3	136.8	139.5	147.2	137.2	132.1	136.8	138.3	144.7	151.5	156.7	170.7	173.3	165.5	162.8
Services less energy	213.9	220.2	221.0	221.3	222.1	222.1	222.1	223.1	223.9	224.9	225.3	225.5	226.0	226.7	227.1

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[4] Indexes on a December 1988 = 100 base.

Dash indicates data not available.

NOTE: Index applied to a month as a whole, not to any specific date.

38. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

	Pricing schedule[1]	All Urban Consumers 2004						Urban Wage Earners 2004					
		Mar.	Apr.	May	June	July	Aug.	Mar.	Apr.	May	June	July	Aug.
U.S. city average	M	187.4	188.0	189.1	189.7	189.4	189.5	182.9	183.5	184.7	185.3	184.9	185.0
Region and area size[2]													
Northeast urban	M	198.6	199.4	199.9	201.1	201.0	201.0	195.1	195.7	196.4	197.5	197.3	197.2
Size A—More than 1,500,000	M	200.7	201.4	202.0	203.3	203.0	203.1	195.9	196.3	197.1	198.3	198.0	198.1
Size B/C—50,000 to 1,500,000[3]	M	117.4	118.1	118.3	118.7	119.2	118.9	117.5	118.1	118.4	118.8	119.1	118.7
Midwest urban[4]	M	181.0	181.5	182.9	183.3	183.2	183.3	175.8	176.3	177.8	178.2	178	178.2
Size A—More than 1,500,000	M	183.1	183.7	185.0	185.3	185.4	185.6	177.2	177.9	179.4	179.4	179.5	179.8
Size B/C—50,000 to 1,500,000[3]	M	115.2	115.6	116.4	116.8	116.3	116.5	114.2	114.6	115.5	116.0	115.5	115.7
Size D—Nonmetropolitan (less than 50,000)	M	174.1	173.9	176.0	176.9	177.1	176.3	171.4	171.2	173.2	174.1	173.7	173.4
South urban	M	180.1	180.9	182.0	182.9	182.6	182.6	180.1	180.9	178.9	179.7	179.3	179.4
Size A—More than 1,500,000	M	181.8	182.5	183.4	184.3	183.7	183.7	178.9	179.7	180.8	181.9	181.2	181.2
Size B/C—50,000 to 1,500,000[3]	M	114.9	115.6	116.4	117.0	116.9	116.9	113.4	114.0	114.8	115.3	115.2	115.3
Size D—Nonmetropolitan (less than 50,000)	M	177.7	178.7	179.4	180.5	180.1	180.0	176.9	177.8	179	180	179.4	179.5
West urban	M	192.2	192.3	193.4	193.3	192.9	193.0	187.1	187.3	188.6	188.6	188.0	188.0
Size A—More than 1,500,000	M	194.5	194.6	195.9	195.9	195.4	195.5	187.9	188.2	189.6	189.7	188.9	188.9
Size B/C—50,000 to 1,500,000[3]	M	117.9	117.8	118.2	117.9	117.9	118.1	117.2	117.2	117.8	117.6	117.4	117.6
Size classes:													
A[5]	M	171.5	172.0	172.9	173.4	173.1	173.2	169.6	170.0	171.2	171.7	171.3	171.4
B/C[3]	M	115.9	116.3	117.0	117.3	117.3	117.3	114.9	115.3	116.0	116.4	116.2	116.2
D	M	178.9	179.3	180.9	181.8	181.3	181.0	176.7	177.2	178.8	179.7	179.0	178.8
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	186.3	187.2	188.7	189.1	189.2	190.2	179.7	180.6	182.2	182.5	182.4	183.2
Los Angeles–Riverside–Orange County, CA	M	191.5	191.9	193.3	193.7	193.4	193.1	184.9	185.2	186.8	187.4	186.8	186.5
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	203.4	204.0	204.4	206.0	205.5	205.7	198.2	198.5	199.1	200.4	200.1	200.3
Boston–Brockton–Nashua, MA–NH–ME–CT	1	208.7	–	181.3	–	208.9	–	207.4	–	207.9	–	207.9	–
Cleveland–Akron, OH	1	180.0	–	179.1	–	181.7	–	171.0	–	172.6	–	172.8	–
Dallas–Ft Worth, TX	1	177.7	–	118.9	–	179.1	–	177.6	–	179.5	–	179.4	–
Washington–Baltimore, DC–MD–VA–WV[7]	1	118.1	–	118.9	–	120.2	–	117.6	–	118.4	–	119.7	–
Atlanta, GA	2	–	182.3	–	185.7	–	184.1	–	180.0	–	184.0	–	182.5
Detroit–Ann Arbor–Flint, MI	2	–	184.7	–	185.8	–	186.8	–	179.3	–	180.4	–	181.5
Houston–Galveston–Brazoria, TX	2	–	169.7	–	169.3	–	169.1	–	166.8	–	167.6	–	167.4
Miami–Ft. Lauderdale, FL	2	–	185.2	–	185.6	–	185.1	–	182.6	–	183.4	–	182.9
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	–	194.8	–	198.0	–	199.1	–	194.0	–	197.3	–	198.0
San Francisco–Oakland–San Jose, CA	2	–	198.3	–	199.0	–	198.7	–	194.7	–	195.4	–	195.0
Seattle–Tacoma–Bremerton, WA	2	–	194.3	–	195.3	–	194.6	–	189.1	–	190.4	–	189.6

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:

M—Every month.

1—January, March, May, July, September, and November.

2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnatti, OH–KY–IN; Kansas City, MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Port-land–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date.

Dash indicates data not available.

39. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Consumer Price Index for All Urban Consumers:											
All items:											
Index	144.5	148.2	152.4	156.9	160.5	163.0	166.6	172.2	177.1	179.9	184.0
Percent change	3.0	2.6	2.8	3.0	2.3	1.6	2.2	3.4	2.8	1.6	2.3
Food and beverages:											
Index	141.6	144.9	148.9	153.7	157.7	161.1	164.6	168.4	173.6	176.8	180.5
Percent change	2.1	2.3	2.8	3.2	2.6	2.2	2.2	2.3	3.1	1.8	2.1
Housing:											
Index	141.2	144.8	148.5	152.8	156.8	160.4	163.9	169.6	176.4	180.3	184.8
Percent change	2.7	2.5	2.6	2.9	2.6	2.3	2.2	3.5	4.0	2.2	2.5
Apparel:											
Index	133.7	133.4	132.0	131.7	132.9	133.0	131.3	129.6	127.3	124.0	120.9
Percent change	1.4	–.2	–1.0	–.2	.9	.1	–1.3	–1.3	–1.8	–2.6	–2.5
Transportation:											
Index	130.4	134.3	139.1	143.0	144.3	141.6	144.4	153.3	154.3	152.9	157.6
Percent change	3.1	3.0	3.6	2.8	0.9	–1.9	2.0	6.2	0.7	–.9	3.1
Medical care:											
Index	201.4	211.0	220.5	228.2	234.6	242.1	250.6	260.8	272.8	285.6	297.1
Percent change	5.9	4.8	4.5	3.5	2.8	3.2	3.5	4.1	4.6	4.7	4.0
Other goods and services:											
Index	192.9	198.5	206.9	215.4	224.8	237.7	258.3	271.1	282.6	293.2	298.7
Percent change	5.2	2.9	4.2	4.1	4.4	5.7	8.7	5.0	4.2	3.8	1.9
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index	142.1	145.6	149.8	154.1	157.6	159.7	163.2	168.9	173.5	175.9	179.8
Percent change	2.8	2.5	2.9	2.9	2.3	1.3	2.2	3.5	2.7	1.4	2.2

40. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2003					2004							
	2002	2003	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May[p]	June[p]	July[p]	Aug.[p]
Finished goods	138.9	143.3	143.7	144.0	145.5	144.5	144.5	145.4	145.3	146.3	147.3	149.1	148.7	148.7	148.6
Finished consumer goods	139.4	145.3	145.9	146.4	147.7	146.5	146.7	147.8	147.8	149.0	150.4	152.6	152.0	152.0	151.9
Finished consumer foods	140.1	145.9	146.3	148.0	151.0	150.1	150.3	148.1	148.4	150.7	152.7	155.3	154.5	152.1	152.2
Finshed consumer goods excluding foods	138.8	144.7	145.4	145.5	146.2	144.8	145.0	147.4	147.3	148.0	149.1	151.1	150.7	151.7	151.4
Nondurable goods less food	139.8	148.4	150.0	150.4	149.4	147.6	148.2	151.7	151.6	152.4	154.3	157.0	156.3	157.9	158.0
Durable goods	133.0	133.1	131.8	131.1	135.6	135.0	134.3	134.3	134.2	134.7	134.4	134.8	135.0	134.6	133.7
Capital equipment	139.1	139.5	139.2	138.9	140.8	140.5	140.2	140.5	140.2	140.5	140.6	141.1	141.3	141.2	141.1
Intermediate materials, supplies, and components	127.8	133.7	134.1	134.1	134.1	134.1	134.5	136.2	137.3	138.3	140.2	141.9	142.7	143.8	144.9
Materials and components for manufacturing	126.1	129.7	129.8	129.8	130.5	130.7	130.9	131.9	133.2	134.3	136.2	137.3	138.0	138.6	139.6
Materials for food manufacturing	123.2	134.4	135.5	137.4	141.8	141.6	140.7	138.4	139.3	141.7	146.6	151.6	151.9	147.9	145.4
Materials for nondurable manufacturing	129.2	137.2	137.5	136.4	137.5	137.2	137.9	140.2	141.0	141.4	143.5	144.5	145.7	147.1	149.5
Materials for durable manufacturing	124.7	127.9	127.5	128.6	129.5	130.5	131.2	132.9	137.3	140.7	144.3	146.2	147.9	149.4	151.0
Components for manufacturing	126.1	125.9	125.8	125.8	125.8	125.8	125.8	125.9	126.2	126.5	127.1	127.4	127.6	127.8	128.1
Materials and components for construction	151.3	153.6	153.7	155.0	155.2	155.6	155.6	156.2	159.0	161.9	164.7	166.2	167.3	167.8	170.0
Processed fuels and lubricants	96.3	112.6	114.5	113.7	111.5	110.3	111.7	116.8	116.8	116.5	118.4	122.1	123.7	126.5	128.5
Containers	152.1	153.7	153.6	153.5	153.2	153.4	153.5	153.9	153.7	154.1	154.9	156.8	158.0	159.5	161.4
Supplies	138.9	141.5	141.2	141.7	141.9	142.6	142.8	143.2	143.8	144.8	146.4	147.2	147.3	148.1	147.5
Crude materials for further processing	108.1	135.3	131.3	134.7	138.3	137.0	141.1	147.8	150.1	152.9	155.7	159.6	162.3	162.0	160.7
Foodstuffs and feedstuffs	99.5	113.5	111.5	119.0	128.1	125.7	124.7	117.1	122.2	131.7	135.4	142.1	137.4	131.0	124.7
Crude nonfood materials	111.4	148.2	142.7	142.8	141.1	141.4	149.5	167.3	167.3	164.8	166.6	168.3	176.6	181.3	183.9
Special groupings:															
Finished goods, excluding foods	138.3	142.4	142.7	142.7	143.8	142.8	142.8	144.5	144.3	144.9	145.7	147.2	147.0	147.6	147.4
Finished energy goods	88.8	102.0	104.7	105.2	103.2	100.4	101.0	106.0	105.7	107.0	109.5	113.7	112.8	115.1	115.1
Finished goods less energy	147.3	149.0	148.7	149.0	151.4	151.0	150.9	150.6	150.5	151.3	151.9	152.9	152.7	152.1	151.9
Finished consumer goods less energy	150.8	153.1	152.8	153.3	156.1	155.5	155.5	154.9	155.0	156.1	156.9	158.1	157.8	156.8	156.6
Finished goods less food and energy	150.2	150.5	149.9	149.7	152.0	151.7	151.4	151.8	151.7	152.0	152.1	152.5	152.5	152.4	152.2
Finished consumer goods less food and energy	157.6	157.9	157.2	157.0	159.5	159.2	159.0	159.4	159.4	159.7	159.8	160.1	160.1	160.0	159.7
Consumer nondurable goods less food and energy	177.5	177.9	178.0	177.8	178.6	178.5	178.9	179.7	179.8	179.8	180.5	180.6	180.3	180.5	180.8
Intermediate materials less foods and feeds	128.5	134.2	134.6	134.5	134.4	134.2	134.7	136.5	137.6	138.4	140.2	141.7	142.8	144.0	145.4
Intermediate foods and feeds	115.5	125.9	125.0	128.4	131.9	134.8	134.1	132.2	133.7	137.0	143.2	147.6	144.6	143.2	136.0
Intermediate energy goods	95.9	111.9	114.3	112.8	110.7	109.5	110.9	115.8	115.8	115.6	117.3	121.1	122.7	125.4	127.1
Intermediate goods less energy	134.5	137.7	137.5	138.0	138.5	138.8	139.0	139.8	141.1	142.4	144.4	145.5	146.1	146.8	147.7
Intermediate materials less foods and energy	135.8	138.5	138.4	138.7	139.0	139.2	139.5	140.4	141.7	142.9	144.6	145.5	146.4	147.1	148.5
Crude energy materials	102.0	147.2	139.7	138.2	134.3	132.5	141.8	163.5	158.9	153.0	158.8	165.3	178.0	178.3	178.1
Crude materials less energy	108.7	123.4	121.7	128.2	135.9	135.5	136.2	133.2	139.8	148.0	148.7	151.0	147.1	146.5	144.5
Crude nonfood materials less energy	135.7	152.5	151.8	155.5	159.5	164.8	170.1	179.3	189.9	195.2	187.6	178.3	176.7	191.6	200.9

41. Producer Price Indexes for the net output of major industry groups

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2003	2004							
		Dec.	Jan.	Feb.	Mar.	Apr.	May[p]	June[p]	July[p]	Aug.[p]
–	**Total mining industries (December 1984=100)**	129.0	144.6	140.3	136.6	140.9	145.0	153.8	155.2	157.2
211	Oil and gas extraction(December 1985=100)	155.1	181.1	172.5	165.4	171.7	180.1	195.3	196.9	198.7
212	Mining, except oil and gas	100.0	103.3	105.2	105.9	108.5	107.5	107.8	108.5	110.2
213	Mining support activities	100.0	101.2	100.8	100.8	101.0	100.5	102.2	103.5	105.5
–	**Total manufacturing industries (December 1984=100)**	137.7	138.9	139.3	140.3	141.8	143.4	143.0	143.4	143.7
311	Food manufacturing (December 1984=100)	141.1	139.3	140.4	142.4	146.1	148.9	148.3	146.7	144.4
312	Beverage and tobacco manufacturing	100.0	101.4	101.2	100.7	101.5	101.2	101.3	100.9	101.4
313	Textile mills	100.0	100.4	100.3	100.2	100.7	100.8	101.4	101.6	101.6
315	Apparel manufacturing	100.0	99.9	99.7	99.8	99.9	100.0	99.8	99.6	99.6
316	Leather and allied product manufacturing (December 1984=100)	143.4	143.3	143.6	143.8	143.5	143.6	143.1	143.6	143.7
321	Wood products manufacturing	100.0	99.3	102.7	105.9	108.1	110.2	108.4	106.7	109.9
322	Paper manufacturing	100.0	99.3	99.4	99.5	100.1	100.9	102.1	103.4	104.2
323	Printing and related support activities	100.0	100.2	100.2	100.4	100.8	100.9	101.0	101.3	101.5
324	Petroleum and coal products manufacturing (December 1984=100)	117.5	131.5	130.7	134.3	141.9	152.3	143.9	152.0	155.6
325	Chemical manufacturing (December 1984=100)	165.3	167.0	167.9	168.8	169.7	170.1	171.7	172.0	173.2
326	Plastics and rubber products manufacturing (December 1984=100)	128.8	128.9	129.4	129.6	130.0	130.6	131.1	131.4	131.8
331	Primary metal manufacturing (December 1984=100)	121.4	124.0	128.5	132.3	138.4	141.3	145.1	147.6	149.1
332	Fabricated metal product manufacturing (December 1984=100)	133.7	134.6	135.7	137.5	139.4	140.7	142.0	142.6	143.7
333	Machinery manufacturing	100.0	100.3	100.6	100.9	101.3	101.6	101.7	102.1	102.2
334	Computer and electronic products manufacturing	100.0	99.8	99.5	99.3	99.5	99.9	99.3	99.0	98.9
335	Electrical equipment, appliance, and components manufacturing	100.0	100.2	100.7	101.8	102.7	103.5	103.6	103.7	103.8
336	Transportation equipment manufacturing	100.0	100.2	100.1	100.4	100.2	100.4	100.6	100.4	99.9
337	Furniture and related product manufacturing(December 1984=100)	147.6	147.4	148.7	149.0	149.7	150.9	152.9	152.1	152.7
339	Miscellaneous manufacturing	100.0	100.5	100.9	100.8	101.0	100.9	101.0	101.3	101.0
	Retail trade									
441	Motor vehicle and parts dealers	100.0	101.6	101.7	103.2	103.8	103.3	104.3	104.0	103.4
442	Furniture and home furnishings stores	100.0	99.5	100.8	101.8	102.0	101.1	102.8	102.5	103.0
443	Electronics and appliance stores	100.0	101.4	99.7	99.9	101.2	95.8	98.9	99.9	98.8
446	Health and personal care stores	100.0	99.6	99.9	96.9	97.4	98.3	97.5	99.5	101.5
447	Gasoline stations (June 2001=100)	47.9	45.5	46.6	55.4	56.6	50.3	59.0	46.0	47.0
454	Nonstore retailers	100.0	102.9	105.4	113.2	108.6	106.3	106.8	106.1	103.6
	Transportation and warehousing									
481	Air transportation (December 1992=100)	162.7	163.3	163.6	162.0	162.3	162.2	163.1	163.4	165.1
483	Water transportation	100.0	99.0	98.9	99.4	100.1	100.3	100.3	100.4	100.5
491	Postal service (June 1989=100)	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0	155.0
	Utilities									
221	Utilities	100.0	101.7	102.5	101.2	101.8	103.3	106.7	107.1	107.5
	Health care and social assistance									
6211	Office of physicians (December 1996=100)	112.8	114.1	114.3	114.3	114.4	114.2	114.4	114.5	114.5
6215	Medical and diagnostic laboratories	100.0	100.3	99.8	99.8	99.8	99.8	100.2	100.0	100.0
6216	Home health care services (December 1996=100)	119.0	119.5	119.6	119.6	119.7	119.7	119.7	119.9	119.8
622	Hospitals (December 1992=100)	137.6	139.5	140.1	140.3	140.7	140.7	140.8	142.3	142.1
6231	Nursing care facilities	100.0	101.2	101.4	101.6	101.9	101.6	101.3	102.1	102.9
62321	Residential mental retardation facilities	100.0	100.1	99.9	99.9	99.9	100.6	99.9	99.9	100.6
	Other services industries									
511	Publishing industries, except Internet	100.0	100.9	101.3	101.3	101.4	101.4	101.3	101.8	101.2
515	Broadcasting, except Internet	100.0	97.8	99.1	100.3	101.6	102.4	103.6	100.3	100.1
517	Telecommunications	100.0	100.4	100.0	100.2	100.1	99.9	100.0	99.7	100.0
5182	Data processing and related services	100.0	99.9	98.9	98.4	98.5	100.7	99.3	99.0	99.0
523	Security, commodity contracts, and like activity	100.0	101.8	102.0	101.7	102.3	102.3	102.9	102.5	102.3
53112	Lessors or nonresidental buildings (except miniwarehouse)	100.0	99.1	99.4	99.6	101.0	102.3	101.5	103.2	105.2
5312	Offices of real estate agents and brokers	100.0	100.0	100.2	100.7	100.8	100.9	100.9	101.1	101.1
5313	Real estate support activities	100.0	100.1	100.6	101.1	101.3	102.0	97.6	101.5	102.7
5321	Automotive equipment rental and leasing (June 2001=100)	109.1	107.9	109.8	107.4	106.0	104.4	105.2	109.7	111.0
5411	Legal services (December 1996=100)	126.5	131.4	131.7	131.7	131.8	131.8	131.8	132.0	131.9
541211	Offices of certified public accountants	100.0	100.8	100.7	100.8	101.1	101.3	101.1	101.3	101.6
5413	Architectural, engineering, and related services (December 1996=100)	125.3	125.7	125.9	126.5	126.6	126.3	126.4	126.9	126.9
54181	Advertising agencies	100.0	99.6	99.6	99.8	99.9	100.1	100.1	100.3	100.7
5613	Employment services (December 1996=100)	112.1	112.1	112.5	113.2	113.1	113.4	114.1	114.8	114.8
56151	Travel agencies	100.0	99.0	98.7	98.7	98.7	98.3	96.9	96.1	95.4
56172	Janitorial services	100.0	100.3	100.3	100.4	100.5	100.5	101.1	100.8	101.6
5621	Waste collection	100.0	100.8	101.3	100.8	101.3	101.9	101.8	101.3	101.3
721	Accommodation (December 1996=100)	120.5	122.2	123.6	124.9	124.8	125.0	124.0	128.6	128.6

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system.

42. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Finished goods											
Total	124.7	125.5	127.9	131.3	131.8	130.7	133.0	138.0	140.7	138.9	143.3
Foods	125.7	126.8	129.0	133.6	134.5	134.3	135.1	137.2	141.3	140.1	146.0
Energy	78.0	77.0	78.1	83.2	83.4	75.1	78.8	94.1	96.8	88.8	102.0
Other	135.8	137.1	140.0	142.0	142.4	143.7	146.1	148.0	150.0	150.2	150.5
Intermediate materials, supplies, and components											
Total	116.2	118.5	124.9	125.7	125.6	123.0	123.2	129.2	129.7	127.8	133.7
Foods	115.6	118.5	119.5	125.3	123.2	123.2	120.8	119.2	124.3	123.3	134.4
Energy	84.6	83.0	84.1	89.8	89.0	80.8	84.3	101.7	104.1	95.9	111.9
Other	123.8	127.1	135.2	134.0	134.2	133.5	133.1	136.6	136.4	135.8	138.5
Crude materials for further processing											
Total	102.4	101.8	102.7	113.8	111.1	96.8	98.2	120.6	121.3	108.1	135.3
Foods	108.4	106.5	105.8	121.5	112.2	103.9	98.7	100.2	106.2	99.5	113.5
Energy	76.7	72.1	69.4	85.0	87.3	68.6	78.5	122.1	122.8	102.0	147.5
Other	94.1	97.0	105.8	105.7	103.5	84.5	91.1	118.0	101.8	101.0	116.8

43. U.S. export price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2003					2004							
		Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
0	**Food and live animals**	107.6	112.1	112.2	115.2	116.5	117.0	119.9	122.7	126.1	126.7	124.0	120.4	117.1
01	Meat and meat preparations	108.9	117.2	123.5	125.6	123.0	122.8	125.0	127.1	127.6	127.7	127.3	124.1	126.2
04	Cereals and cereal preparations	115.7	124.2	119.4	125.6	130.8	131.6	135.2	139.6	147.7	146.0	141.2	128.0	120.5
05	Vegetables, fruit, and nuts, prepared fresh or dry	99.7	101.4	103.2	102.8	103.2	103.1	108.4	110.1	109.5	113.3	111.1	110.1	114.1
2	**Crude materials, inedible, except fuels**	102.3	106.2	111.2	116.3	116.9	120.2	122.3	129.0	132.8	132.5	125.6	129.6	115.3
22	Oilseeds and oleaginous fruits	109.2	121.1	136.7	150.9	152.5	157.2	160.9	181.6	197.1	199.0	168.5	184.5	117.4
24	Cork and wood	90.9	91.6	92.0	92.5	93.7	94.5	95.6	96.5	97.6	98.2	98.3	99.0	99.1
25	Pulp and waste paper	85.3	88.8	90.8	91.9	91.7	91.7	92.5	94.2	98.8	100.4	100.8	100.1	99.5
26	Textile fibers and their waste	107.0	109.6	121.4	128.5	121.2	123.7	122.2	121.9	115.9	114.9	108.7	102.9	101.5
28	Metalliferous ores and metal scrap	117.8	119.9	121.1	129.6	136.6	148.9	156.8	171.4	176.2	170.6	167.8	176.1	169.7
3	**Mineral fuels, lubricants, and related products**	114.9	108.7	108.2	106.3	110.7	120.5	119.3	123.0	123.2	135.1	130.3	136.5	139.4
32	Coal, coke, and briquettes	111.2	111.6	111.6	111.6	112.9	–	–	–	–	–	–	–	–
33	Petroleum, petroleum products, and related materials	113.0	104.2	104.1	101.2	106.2	116.8	114.7	120.1	119.8	135.0	127.7	133.2	136.1
5	**Chemicals and related products, n.e.s.**	100.0	100.3	100.7	100.9	101.4	102.9	104.0	104.9	105.5	105.6	105.8	107.0	108.2
54	Medicinal and pharmaceutical products	105.5	105.4	105.9	106.5	105.8	105.4	105.3	105.5	105.7	105.7	105.8	1,073.8	108.0
55	Essential oils; polishing and cleaning preparations	97.6	98.2	98.9	99.4	100.1	104.3	104.2	104.3	104.1	104.4	104.3	104.1	104.1
57	Plastics in primary forms	94.8	95.4	95.5	95.8	96.5	98.3	100.9	102.1	102.2	102.9	103.2	106.2	107.4
58	Plastics in nonprimary forms	98.4	98.2	98.3	97.1	97.2	96.8	97.2	97.4	96.9	96.7	96.4	97.5	97.8
59	Chemical materials and products, n.e.s.	101.9	101.9	102.4	102.5	102.6	105.0	105.2	104.8	104.8	104.8	104.8	104.8	106.8
6	**Manufactured goods classified chiefly by materials**	100.0	100.2	100.3	100.7	100.8	101.7	103.0	104.1	105.6	106.6	107.0	108.6	109.9
62	Rubber manufactures, n.e.s.	109.5	109.2	109.2	109.5	109.9	110.4	110.9	110.4	110.9	110.8	111.2	111.9	112.1
64	Paper, paperboard, and articles of paper, pulp, and paperboard	98.3	98.3	97.4	97.9	97.6	97.9	97.8	97.9	98.7	99.0	99.3	101.7	101.9
66	Nonmetallic mineral manufactures, n.e.s.	100.2	99.5	99.5	99.7	99.8	99.7	99.6	99.7	99.7	99.5	100.0	100.1	100.3
68	Nonferrous metals	80.9	81.6	81.9	83.4	84.5	85.9	90.9	94.1	98.1	97.6	95.4	95.5	96.9
7	**Machinery and transport equipment**	97.9	97.9	97.7	97.7	97.8	97.9	98.1	98.2	98.4	98.4	98.2	98.3	98.4
71	Power generating machinery and equipment	107.4	107.5	107.9	108.5	108.7	109.3	109.4	109.4	108.7	108.7	108.8	108.9	109.0
72	Machinery specialized for particular industries	103.2	103.1	103.1	103.3	103.4	103.9	104.0	104.2	105.1	105.4	105.4	105.7	105.9
74	General industrial machines and parts, n.e.s., and machine parts	102.5	102.6	102.6	102.8	102.8	103.3	103.5	104.0	104.5	104.8	104.9	105.3	105.4
75	Computer equipment and office machines	88.0	87.8	87.9	88.0	88.6	87.7	88.2	88.4	88.8	88.6	87.0	86.4	86.3
76	Telecommunications and sound recording and reproducing apparatus and equipment	93.4	93.3	92.8	92.2	92.0	92.6	92.5	92.4	92.2	92.0	91.9	91.6	91.6
77	Electrical machinery and equipment	89.8	89.4	88.6	88.2	88.1	88.0	88.3	88.6	88.5	88.6	88.3	88.4	88.5
78	Road vehicles	101.3	101.4	101.5	101.6	101.5	101.7	101.9	101.9	102.3	102.3	102.4	102.5	102.7
87	**Professional, scientific, and controlling instruments and apparatus**	102.3	102.2	102.1	102.3	102.3	102.2	102.3	102.3	102.2	102.1	102.0	101.8	101.9

44. U.S. import price indexes by Standard International Trade Classification

[2000 = 100]

SITC Rev. 3	Industry	2003					2004							
		Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
0	**Food and live animals**	99.5	100.0	100.3	100.0	101.0	102.2	104.7	105.4	106.4	106.1	106.8	107.4	107.6
01	Meat and meat preparations	108.2	112.8	115.2	117.2	120.4	117.7	118.0	120.4	121.7	124.4	128.8	133.7	133.9
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	82.3	82.2	79.8	79.3	79.2	78.2	80.0	83.3	85.1	84.1	84.1	86.1	87.5
05	Vegetables, fruit, and nuts, prepared fresh or dry	105.5	105.0	106.4	108.9	109.4	112.3	115.7	111.3	109.5	106.1	105.9	102.3	101.4
07	Coffee, tea, cocoa, spices, and manufactures thereof	96.6	98.6	95.5	93.1	96.0	100.1	101.9	101.7	103.6	102.4	107.1	102.7	102.9
1	**Beverages and tobacco**	104.0	104.0	104.3	104.4	104.4	104.7	105.0	105.3	105.3	105.4	105.3	105.3	105.5
11	Beverages	103.9	103.9	104.2	104.2	104.3	104.9	105.2	105.5	105.5	105.7	105.6	105.7	105.9
2	**Crude materials, inedible, except fuels**	100.5	106.1	104.2	104.5	107.9	109.5	114.1	120.0	122.9	127.3	125.8	125.6	134.0
24	Cork and wood	99.3	113.0	106.2	103.2	108.0	108.9	115.7	123.3	127.8	139.0	136.1	132.1	149.0
25	Pulp and waste paper	91.9	90.4	90.8	91.9	92.8	93.3	91.9	95.4	100.8	103.4	106.5	108.0	107.6
28	Metalliferous ores and metal scrap	102.9	103.7	104.3	108.7	115.3	124.2	134.6	148.0	148.2	143.5	140.4	144.4	160.1
29	Crude animal and vegetable materials, n.e.s.	96.8	95.7	95.1	94.8	99.6	98.9	99.5	99.7	99.3	102.1	98.0	101.2	97.6
3	**Mineral fuels, lubricants, and related products**	106.5	101.5	101.3	103.3	108.2	117.3	117.7	120.8	121.1	131.6	131.5	133.5	145.1
33	Petroleum, petroleum products, and related materials	105.6	99.4	100.1	102.3	106.9	114.0	114.5	120.0	120.3	131.5	130.0	132.7	145.3
34	Gas, natural and manufactured	108.8	114.4	106.2	106.6	113.9	138.0	137.1	122.9	123.3	129.5	140.2	134.8	139.2
5	**Chemicals and related products, n.e.s.**	99.2	99.2	100.2	100.8	101.1	103.0	103.4	103.8	103.5	103.5	103.8	105.3	105.9
52	Inorganic chemicals	106.0	105.4	108.8	111.9	114.0	119.3	120.6	120.5	115.9	117.5	119.7	125.5	127.4
53	Dying, tanning, and coloring materials	98.3	97.7	98.1	99.0	99.6	99.9	99.7	99.5	100.6	100.8	101.0	101.2	101.5
54	Medicinal and pharmaceutical products	102.5	101.9	102.3	103.4	103.4	107.2	107.7	108.1	107.7	107.3	107.1	107.7	107.7
55	Essential oils; polishing and cleaning preparations	91.8	91.6	91.2	91.6	91.6	92.7	93.3	93.7	93.5	93.4	93.5	93.6	93.6
57	Plastics in primary forms	103.1	102.7	105.6	105.6	105.5	104.4	105.2	106.9	105.5	105.8	104.6	108.3	108.2
58	Plastics in nonprimary forms	101.4	101.4	101.7	101.7	101.8	102.1	102.4	102.9	102.9	102.9	102.3	102.8	103.0
59	Chemical materials and products, n.e.s.	91.9	91.8	92.3	93.1	93.3	94.3	94.9	95.8	95.4	95.1	95.2	96.0	96.4
6	**Manufactured goods classified chiefly by materials**	95.4	95.7	96.5	97.4	97.8	98.9	101.4	103.6	105.6	106.9	106.1	106.1	107.5
62	Rubber manufactures, n.e.s.	98.5	98.5	98.5	98.6	98.8	99.0	99.2	99.7	99.9	100.0	100.5	100.6	100.8
64	Paper, paperboard, and articles of paper, pulp, and paperboard	94.9	94.5	94.7	94.2	93.7	94.1	94.5	95.0	94.8	95.5	95.5	96.4	96.6
66	Nonmetallic mineral manufactures, n.e.s.	97.8	97.8	97.9	98.1	98.1	98.5	98.9	99.0	99.3	99.4	99.4	99.5	100.4
68	Nonferrous metals	79.1	80.7	82.0	85.1	87.7	92.3	97.0	102.6	105.8	106.1	101.6	102.3	105.1
69	Manufactures of metals, n.e.s.	98.4	98.5	98.7	99.1	99.5	99.7	100.3	101.1	102.3	102.4	102.4	102.7	103.3
7	**Machinery and transport equipment**	95.6	95.5	95.3	95.4	95.3	95.4	95.5	95.5	95.2	95.2	95.1	95.0	94.9
72	Machinery specialized for particular industries	102.5	102.2	102.4	103.3	103.6	104.9	106.4	106.7	106.5	106.7	106.5	107.2	107.7
74	General industrial machines and parts, n.e.s., and machine parts	100.4	100.2	100.4	100.9	101.2	101.8	102.5	103.3	103.5	103.6	103.5	104.1	104.3
75	Computer equipment and office machines	80.6	80.5	78.6	78.5	78.2	78.0	78.0	77.7	76.5	76.4	75.4	74.9	74.4
76	Telecommunications and sound recording and reproducing apparatus and equipment	88.8	88.6	87.7	87.5	86.7	86.4	85.4	85.1	84.9	84.9	84.7	84.4	84.1
77	Electrical machinery and equipment	96.0	96.0	95.9	96.0	95.3	95.4	95.7	95.6	94.9	94.8	94.7	94.6	94.7
78	Road vehicles	100.7	100.6	101.3	101.4	101.6	101.9	102.0	102.0	102.2	102.3	102.4	102.5	102.5
85	Footwear	99.8	99.9	100.0	100.1	100.1	100.5	100.5	100.6	100.6	100.6	100.4	100.4	100.3
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	99.6	99.2	99.3	99.8	99.9	99.9	100.3	100.0	99.4	99.3	99.0	98.1	98.1

45. U.S. export price indexes by end-use category

[2000 = 100]

Category	2003					2004							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
ALL COMMODITIES	99.4	99.8	100.0	100.5	100.8	101.5	102.2	103.0	103.7	104.1	103.3	103.8	103.3
Foods, feeds, and beverages	109.4	115.3	117.2	121.4	122.4	123.1	125.6	130.5	134.8	135.6	129.2	128.2	116.6
Agricultural foods, feeds, and beverages	109.5	116.3	118.4	122.8	123.8	124.6	127.2	132.4	137.0	138.0	131.1	129.9	117.0
Nonagricultural (fish, beverages) food products	109.5	106.5	105.6	107.5	108.5	109.5	110.7	112.1	113.4	112.7	111.4	111.6	112.0
Industrial supplies and materials	100.0	100.2	101.0	101.7	102.5	105.1	106.4	108.1	109.1	110.2	109.8	111.6	112.5
Agricultural industrial supplies and materials	105.5	107.3	113.3	119.0	117.5	118.6	116.6	117.2	114.8	113.7	110.7	108.7	108.0
Fuels and lubricants	100.4	97.6	97.5	96.4	99.0	106.1	106.5	108.9	109.6	117.5	114.1	117.8	119.5
Nonagricultural supplies and materials, excluding fuel and building materials	100.1	100.5	101.1	101.7	102.5	104.7	106.4	108.1	109.4	109.9	110.0	112.0	112.8
Selected building materials	98.0	98.4	98.8	99.1	99.5	98.7	100.9	102.3	103.4	103.9	103.4	102.9	103.5
Capital goods	97.7	97.5	97.3	97.3	97.5	97.5	97.8	98.0	98.1	98.1	97.8	97.9	98.0
Electric and electrical generating equipment	101.6	101.7	101.7	101.7	101.7	102.0	101.9	102.0	101.7	101.7	102.0	102.1	102.2
Nonelectrical machinery	94.5	94.3	93.9	93.9	94.1	93.9	94.3	94.5	94.6	94.6	94.1	94.1	94.2
Automotive vehicles, parts, and engines	101.8	101.8	101.9	101.9	101.8	101.9	102.0	101.9	102.2	102.3	102.4	102.5	102.6
Consumer goods, excluding automotive	99.4	99.4	99.8	100.0	99.9	100.2	100.1	100.2	100.4	100.5	100.4	100.9	101.1
Nondurables, manufactured	98.7	98.5	99.0	99.4	99.2	99.9	99.9	99.9	100.1	100.1	99.9	100.8	101.0
Durables, manufactured	99.9	100.1	100.3	100.3	100.3	100.1	100.0	100.1	100.5	100.6	100.7	100.9	101.1
Agricultural commodities	108.8	114.7	117.5	122.2	122.7	123.5	125.3	129.7	133.0	133.7	127.4	126.1	115.4
Nonagricultural commodities	98.7	98.6	98.7	98.8	99.1	99.8	100.4	100.9	101.4	101.7	101.5	102.1	102.5

46. U.S. import price indexes by end-use category

[2000 = 100]

Category	2003					2004							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
ALL COMMODITIES	96.7	96.2	96.3	96.8	97.5	99.0	99.4	100.2	100.4	101.9	101.7	102.0	103.7
Foods, feeds, and beverages	101.3	101.8	101.9	102.4	103.2	103.7	105.3	105.9	107.2	106.8	106.8	107.2	107.3
Agricultural foods, feeds, and beverages	107.6	108.3	109.0	109.7	110.9	112.0	113.4	113.0	114.2	114.0	114.3	114.1	113.8
Nonagricultural (fish, beverages) food products	87.4	87.6	86.3	86.0	86.0	85.1	87.2	90.1	91.7	90.6	90.1	91.6	92.6
Industrial supplies and materials	100.5	98.9	99.5	100.7	103.6	108.5	110.0	112.7	113.9	119.7	119.3	120.5	127.1
Fuels and lubricants	104.2	99.4	100.1	102.0	107.2	116.5	117.0	120.2	120.6	131.0	130.9	132.7	144.4
Petroleum and petroleum products	103.2	97.2	98.8	100.9	106.0	113.7	114.3	120.1	119.9	131.2	129.6	132.2	144.9
Paper and paper base stocks	94.7	94.0	94.0	93.9	93.9	94.1	94.2	95.6	96.8	98.2	99.0	100.1	100.2
Materials associated with nondurable supplies and materials	102.3	102.5	103.4	104.2	104.4	104.7	104.8	105.4	105.1	105.4	106.0	107.3	108.5
Selected building materials	102.7	110.3	109.5	108.1	108.0	106.8	113.7	118.4	120.2	123.6	120.5	117.5	123.9
Unfinished metals associated with durable goods	92.9	93.4	94.4	96.4	99.2	104.5	109.5	114.9	121.7	126.2	124.5	126.3	129.5
Nonmetals associated with durable goods	97.3	97.5	97.7	98.1	98.2	98.5	99.2	99.3	99.3	99.1	98.8	98.6	98.8
Capital goods	93.6	93.5	93.0	93.3	92.9	93.1	93.1	93.1	92.6	92.6	92.2	92.2	92.2
Electric and electrical generating equipment	96.6	95.8	96.2	96.5	96.8	97.4	97.9	97.8	97.2	97.1	97.0	97.5	97.8
Nonelectrical machinery	92.1	92.1	91.4	91.6	91.1	91.2	91.2	91.2	90.6	90.5	90.1	90.0	90.0
Automotive vehicles, parts, and engines	100.6	100.5	101.2	101.2	101.4	101.6	101.7	101.8	102.0	102.0	102.2	102.2	102.2
Consumer goods, excluding automotive	97.9	97.9	97.9	98.1	98.1	98.6	98.7	98.7	98.6	98.5	98.4	98.5	98.5
Nondurables, manufactured	99.8	99.7	99.8	100.0	100.1	101.1	101.2	101.3	101.1	101.0	100.9	101.1	101.1
Durables, manufactured	96.2	96.2	96.1	96.2	96.2	96.3	96.3	96.3	96.3	96.0	96.1	95.9	95.9
Nonmanufactured consumer goods	95.6	95.7	95.8	95.8	96.2	95.9	96.2	96.4	96.4	97.3	96.8	97.4	97.9

47. U.S. international price indexes for selected categories of services

[2000 = 100, unless indicated otherwise]

Category	2002				2003				2004	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Air freight (inbound)	93.9	98.3	100.3	105.9	108.8	109.4	112.5	112.9	116.2	116.5
Air freight (outbound)	95.9	98.4	97.3	95.4	97.2	95.4	95.5	94.9	96.1	98.9
Inbound air passenger fares (Dec. 2003 = 100)	–	–	–	–	–	–	–	100.0	105.1	106.1
Outbound air passenger fares (Dec. 2003 = 100)	–	–	–	–	–	–	–	100.0	99.3	114.2
Ocean liner freight (inbound)	91.7	90.3	93.5	93.3	94.0	116.1	116.2	117.7	119.1	121.1

NOTE: Dash indicates data not available.

48. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	2001			2002				2003				2004	
	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Business													
Output per hour of all persons	118.4	118.8	120.9	122.7	123.2	124.7	125.0	126.2	128.6	131.2	132.0	133.3	133.8
Compensation per hour	139.7	140.4	141.5	143.2	144.4	145.0	145.5	147.4	149.6	151.7	153.2	154.2	155.6
Real compensation per hour	112.8	113.2	114.2	115.2	115.2	115.0	114.8	115.3	116.8	117.7	118.7	118.4	118.1
Unit labor costs	117.9	118.2	117.0	116.7	117.2	116.3	116.3	116.8	116.4	115.6	116.0	115.7	116.3
Unit nonlabor payments	109.9	110.2	113.1	113.4	113.6	115.7	116.8	117.7	119.0	120.8	120.7	122.9	124.4
Implicit price deflator	114.9	115.2	115.6	115.5	115.9	116.1	116.5	117.1	117.3	117.5	117.8	118.4	119.4
Nonfarm business													
Output per hour of all persons	118.1	118.5	120.4	122.4	122.8	124.1	124.6	125.8	127.8	130.6	131.7	132.8	133.7
Compensation per hour	138.9	139.6	140.7	142.6	143.8	144.3	144.7	146.6	148.7	150.9	152.5	153.3	154.9
Real compensation per hour	112.2	112.5	113.5	114.7	114.7	114.4	114.3	114.7	116.1	117.1	118.2	117.7	117.6
Unit labor costs	117.6	117.8	116.8	116.4	117.1	116.2	116.1	116.6	116.3	115.5	115.9	115.4	115.9
Unit nonlabor payments	111.6	111.9	114.7	115.1	115.4	117.7	118.9	119.6	120.4	122.3	121.9	124.3	125.7
Implicit price deflator	115.4	115.6	116.0	116.0	116.5	116.8	117.2	117.7	117.8	118.0	118.1	118.7	119.5
Nonfinancial corporations													
Output per hour of all employees	122.8	123.0	123.9	126.3	127.9	129.2	130.2	131.3	134.1	137.2	138.9	138.9	139.4
Compensation per hour	136.7	137.9	139.3	139.9	141.3	142.1	142.9	144.1	146.3	148.5	150.0	150.9	152.4
Real compensation per hour	110.4	111.1	112.5	112.6	112.7	112.7	112.8	112.7	114.2	115.3	116.2	115.9	115.7
Total unit costs	111.6	112.8	113.4	111.6	111.2	110.7	110.4	110.7	109.7	109.0	108.7	108.8	109.5
Unit labor costs	111.4	112.1	112.4	1,110.8	110.5	110.0	109.7	109.8	109.1	108.2	108.0	108.6	109.3
Unit nonlabor costs	112.2	114.7	116.2	114.0	112.9	112.7	112.3	113.2	111.4	111.1	110.5	109.5	109.9
Unit profits	87.3	79.4	75.8	89.1	94.7	95.7	101.8	99.2	111.0	118.7	123.2	128.1	133.1
Unit nonlabor payments	105.6	105.2	105.4	107.4	108.1	108.2	109.5	109.4	111.3	113.1	113.9	114.5	116.1
Implicit price deflator	109.4	109.8	110.1	109.6	109.7	109.4	109.6	109.7	109.8	109.9	110.0	110.6	111.6
Manufacturing													
Output per hour of all persons	135.8	136.9	140.4	143.8	145.7	147.8	148.8	151.0	152.1	155.9	157.2	158.3	160.9
Compensation per hour	137.4	137.3	139.4	144.1	147.0	148.6	149.9	155.7	158.5	161.6	163.9	162.2	163.5
Real compensation per hour	111.0	110.6	112.5	115.9	117.2	117.8	118.3	121.8	123.8	125.4	127.0	124.6	124.1
Unit labor costs	101.2	100.3	99.3	100.2	100.8	100.5	100.7	103.1	104.2	103.6	104.2	102.5	101.6

49. Annual indexes of multifactor productivity and related measures, selected years

[1996 = 100]

Item	1980	1990	1991	1992	1993	1994	1995	1997	1998	1999	2000	2001
Private business												
Productivity:												
Output per hour of all persons	75.8	90.2	91.3	94.8	95.4	96.6	97.3	102.2	105.0	107.7	111.0	112.4
Output per unit of capital services	103.3	99.7	96.5	98.0	98.7	100.4	99.8	100.3	99.3	98.2	96.6	92.8
Multifactor productivity	88.8	95.5	94.5	96.7	97.1	98.2	98.4	101.2	102.5	103.4	105.0	103.9
Output	59.4	83.6	82.6	85.7	88.5	92.8	95.8	105.2	110.5	115.7	120.4	120.2
Inputs:												
Labor input	71.9	89.4	88.3	89.3	91.8	95.6	98.0	103.5	106.1	109.0	110.1	109.5
Capital services	57.6	83.8	85.7	87.5	89.7	92.5	96.0	104.9	111.3	117.9	124.5	129.6
Combined units of labor and capital input	67.0	87.5	87.4	88.7	91.1	94.6	97.3	104.0	107.9	110.9	114.7	115.7
Capital per hour of all persons	73.4	90.4	94.6	96.8	96.6	96.2	97.5	101.9	105.8	109.7	114.8	121.1
Private nonfarm business												
Productivity:												
Output per hour of all persons	77.3	90.3	91.4	94.8	95.3	96.5	97.5	102.0	104.7	107.1	110.3	111.6
Output per unit of capital services	107.6	100.4	97.0	98.2	99.0	100.4	100.0	100.0	99.0	97.6	95.9	92.0
Multifactor productivity	91.0	95.8	94.8	96.7	97.2	98.2	98.6	101.0	102.2	102.9	104.4	103.3
Output	59.6	83.5	82.5	85.5	88.4	92.6	95.8	105.1	110.5	115.7	120.2	120.1
Inputs:												
Labor input	70.7	89.2	87.9	89.0	91.8	95.4	97.8	103.6	106.4	109.5	110.6	110.1
Capital services	55.4	83.2	85.1	87.0	89.4	92.2	95.8	105.1	111.7	118.5	125.4	130.5
Combined units of labor and capital input	65.5	87.2	87.0	88.4	91.0	94.3	97.2	104.1	108.1	112.4	115.2	116.3
Capital per hour of all persons	71.8	89.9	94.3	96.5	96.3	96.1	97.6	101.9	105.8	109.7	115.0	121.3
Manufacturing												
Productivity:												
Output per hour of all persons	62.0	82.2	84.1	88.6	90.2	93.0	96.5	103.8	108.9	114.0	118.3	119.7
Output per unit of capital services	97.2	97.5	93.6	95.9	96.9	99.7	100.6	101.4	101.7	101.7	101.0	95.1
Multifactor productivity	81.2	93.3	92.4	94.0	95.1	97.3	99.2	103.1	105.7	108.7	111.3	110.3
Output	64.3	83.2	81.5	85.5	88.3	92.9	96.9	105.6	110.5	114.7	117.4	112.1
Inputs:												
Hours of all persons	103.7	101.1	96.9	96.5	97.8	99.9	100.4	101.7	101.5	100.7	99.2	99.6
Capital services	66.1	85.3	87.1	89.1	91.1	93.2	96.4	104.1	108.7	112.8	116.2	117.9
Energy	86.1	93.1	93.2	93.1	96.6	99.9	102.3	97.5	100.6	102.9	104.3	98.9
Nonenergy materials	63.9	77.5	78.5	83.5	86.5	90.3	93.1	101.9	107.5	107.9	106.9	105.5
Purchased business services	65.8	84.7	84.6	92.0	92.9	96.0	100.4	103.9	103.1	105.4	106.5	97.7
Combined units of all factor inputs	79.2	89.1	88.3	90.9	92.8	95.5	97.7	102.4	104.6	105.5	105.5	101.6

50. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1980	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Business													
Output per hour of all persons	48.7	66.0	79.0	94.4	101.7	104.5	106.5	109.3	112.4	115.7	118.3	124.0	129.6
Compensation per hour	13.8	23.5	54.0	90.5	106.0	109.5	113.0	119.7	125.4	134.2	139.7	147.8	147.9
Real compensation per hour	60.5	78.4	88.9	96.1	98.9	99.5	100.5	105.0	107.8	111.6	113.0	113.7	115.1
Unit labor costs	28.4	35.6	68.4	95.9	104.3	104.8	106.1	109.5	111.6	116.0	118.1	115.2	114.1
Unit nonlabor payments	24.9	31.5	61.3	93.9	108.2	111.9	113.9	109.9	109.2	107.2	109.5	117.0	123.0
Implicit price deflator	27.1	34.1	65.8	95.1	105.7	107.4	109.0	109.7	110.7	112.7	114.9	115.8	117.4
Nonfarm business													
Output per hour of all persons	51.6	67.7	80.3	94.4	102.1	104.7	106.4	109.2	112.2	115.3	117.8	123.6	129.1
Compensation per hour	14.4	23.6	54.2	90.3	106.0	109.4	112.8	119.4	124.9	133.7	138.9	142.1	147.0
Real compensation per hour	63.0	78.8	89.2	95.9	98.9	99.4	100.3	104.7	107.3	111.2	112.4	113.2	114.4
Unit labor costs	27.9	34.9	67.5	95.6	103.8	104.5	106.0	109.3	111.3	116.0	118.0	115.0	113.9
Unit nonlabor payments	24.3	31.1	60.4	93.6	109.2	112.1	114.6	110.9	110.8	108.8	111.1	119.0	124.8
Implicit price deflator	26.6	33.5	64.9	94.9	105.8	107.3	109.1	109.9	111.1	113.3	115.4	116.4	117.9
Nonfinancial corporations													
Output per hour of all employees	56.6	70.4	81.0	95.5	103.4	107.1	109.8	112.8	116.4	120.6	122.7	128.9	136.3
Compensation per hour	16.1	25.6	57.0	91.0	105.4	108.4	111.7	117.9	123.3	131.7	137.0	140.1	145.9
Real compensation per hour	70.3	85.3	93.8	96.7	98.3	98.5	99.3	103.4	105.9	109.5	110.8	111.5	113.5
Total unit costs	26.9	35.1	68.8	95.4	101.8	100.9	101.2	103.2	104.6	108.0	111.2	109.4	107.4
Unit labor costs	28.4	36.3	70.4	95.3	102.0	101.2	101.7	104.5	106.0	109.2	111.6	108.6	107.0
Unit nonlabor costs	23.0	31.7	64.5	97.1	101.3	99.9	99.8	99.9	101.0	104.8	110.2	111.5	108.4
Unit profits	49.5	43.7	66.5	96.7	136.9	149.9	154.4	137.5	129.8	109.3	91.4	111.4	134.2
Unit nonlabor payments	30.1	34.9	65.1	97.0	110.8	113.3	114.4	109.9	108.7	106.1	105.2	111.5	115.3
Implicit price deflator	28.9	35.9	68.6	95.9	104.9	105.3	105.9	106.3	106.9	108.1	109.5	109.6	109.8
Manufacturing													
Output per hour of all persons	41.8	54.2	70.1	92.9	110.1	113.9	117.9	123.5	128.2	134.2	137.1	147.1	154.6
Compensation per hour	14.9	23.7	55.6	90.1	107.7	109.9	112.0	118.8	123.8	135.0	138.3	143. 8	151.9
Real compensation per hour	65.0	79.2	91.4	95.7	100.5	99.8	99.7	104.2	106.3	112.3	111.8	114.5	118.2
Unit labor costs	35.6	43.8	79.3	97.0	97.8	96.5	95.0	96.2	96.6	100.6	100.8	97.8	98.2
Unit nonlabor payments	26.8	29.3	80.2	101.1	107.6	110.4	110.5	104.1	105.0	107.0	105.8	–	–
Implicit price deflator	30.2	35.0	79.9	99.5	103.9	105.2	104.6	101.1	101.8	104.6	103.9	–	–

Dash indicates data not available.

51. Annual indexes of output per hour for selected NAICS industries, 1990-2002

[1997=100]

NAICS	Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Mining													
21	Mining	86.0	86.8	95.2	96.2	99.6	101.8	101.7	100.0	103.4	111.1	109.5	107.7	112.3
211	Oil and gas extraction	78.4	78.8	81.9	85.1	90.3	95.5	98.9	100.0	101.6	107.9	115.2	117.4	119.3
212	Mining, except oil and gas	79.3	80.0	86.8	89.9	93.0	94.0	96.0	100.0	104.6	105.9	106.8	109.0	111.7
2121	Coal mining	68.1	69.3	75.3	79.9	83.9	88.2	94.9	100.0	106.5	110.3	115.8	114.4	112.2
2122	Metal ore mining	79.9	82.7	91.7	102.2	104.1	98.5	95.3	100.0	109.5	112.7	124.4	131.8	143.9
2123	Nonmetallic mineral mining and quarrying	92.3	89.5	96.1	93.6	96.9	97.3	97.1	100.0	101.3	101.2	96.2	99.3	103.8
	Utilities													
2211	Power generation and supply	71.2	73.8	74.2	78.7	83.0	88.6	95.5	100.0	103.8	104.1	107.0	106.4	102.4
2212	Natural gas distribution	71.4	72.7	75.8	79.8	82.1	89.0	96.1	100.0	99.1	103.1	113.1	110.0	114.9
	Manufacturing													
3111	Animal food	90.1	89.3	90.2	90.2	87.3	94.0	87.5	100.0	109.4	109.5	109.7	127.2	–
3112	Grain and oilseed milling	89.0	91.2	91.1	93.8	94.7	99.1	91.3	100.0	107.5	114.2	112.5	117.3	–
3113	Sugar and confectionery products	91.0	93.8	90.5	92.5	94.0	94.3	98.2	100.0	104.0	107.1	111.9	109.9	–
3114	Fruit and vegetable preserving and specialty	86.4	89.7	90.7	93.8	94.9	97.1	98.2	100.0	106.8	108.4	109.8	117.0	–
3115	Dairy products	90.8	92.1	95.4	93.9	95.4	98.7	98.0	100.0	99.1	94.5	96.0	96.2	–
3116	Animal slaughtering and processing	94.5	96.8	101.5	100.9	97.4	98.5	94.3	100.0	99.9	100.3	101.9	102.7	–
3117	Seafood product preparation and packaging	117.5	112.0	115.3	113.9	114.1	108.4	116.2	100.0	117.0	130.2	137.6	147.3	–
3118	Bakeries and tortilla manufacturing	92.6	92.3	95.6	96.0	96.7	99.7	97.7	100.0	103.8	105.4	105.3	106.3	–
3119	Other food products	91.9	93.5	95.9	102.8	100.3	101.3	103.0	100.0	106.9	108.8	110.2	103.2	–
3121	Beverages	86.5	90.1	93.8	93.2	97.7	99.6	101.1	100.0	98.5	92.4	90.6	91.7	–
3122	Tobacco and tobacco products	81.4	77.3	79.6	73.7	89.8	97.5	99.4	100.0	98.1	92.1	98.0	100.0	–
3131	Fiber, yarn, and thread mills	73.9	74.7	80.1	84.6	87.2	92.0	98.7	100.0	102.2	104.6	102.6	110.5	–
3132	Fabric mills	75.0	77.7	81.5	85.0	91.9	95.8	98.0	100.0	103.9	109.8	110.2	109.1	–
3133	Textile and fabric finishing mills	81.7	80.4	83.7	86.0	87.8	84.5	85.0	100.0	100.6	101.7	104.0	109.7	–
3141	Textile furnishings mills	88.2	88.6	93.0	93.7	90.1	92.5	93.3	100.0	99.9	101.2	106.8	106.9	–
3149	Other textile product millsv	91.1	90.0	92.0	90.3	94.5	95.9	96.3	100.0	97.0	110.4	110.4	105.0	–
3151	Apparel knitting mills	85.6	88.7	93.2	102.5	104.3	109.5	121.9	100.0	96.6	102.0	110.2	108.4	–
3152	Cut and sew apparel	70.1	72.0	73.1	76.6	80.5	85.5	90.5	100.0	104.0	118.8	127.7	131.7	–
3159	Accessories and other apparel	100.9	97.3	98.7	99.0	104.6	112.4	112.6	100.0	110.8	103.3	104.9	114.8	–
3161	Leather and hide tanning and finishing	60.8	56.6	76.7	83.1	75.9	78.6	91.5	100.0	98.0	101.6	110.0	109.7	–
3162	Footwear	77.1	74.7	83.1	81.7	90.4	95.6	103.4	100.0	100.9	116.8	124.1	142.7	–
3169	Other leather products	102.5	100.2	97.0	94.3	80.0	73.2	79.7	100.0	109.2	100.4	107.6	114.1	–
3211	Sawmills and wood preservation	79.2	81.6	86.1	82.6	85.1	91.0	96.2	100.0	100.8	105.4	106.5	109.0	–
3212	Plywood and engineered wood products	102.3	107.4	114.7	108.9	105.8	101.8	101.2	100.0	105.6	99.9	100.5	105.0	–
3219	Other wood products	105.4	104.7	104.0	103.0	99.3	100.4	100.8	100.0	101.5	105.4	104.0	104.6	–
3221	Pulp, paper, and paperboard mills	88.5	88.1	92.3	92.9	97.6	102.0	97.6	100.0	103.1	111.4	115.7	117.5	–
3222	Converted paper products	90.5	93.5	93.7	96.3	97.6	97.2	98.3	100.0	102.7	101.5	101.9	101.0	–
3231	Printing and related support activities	96.6	95.4	101.3	100.1	98.3	98.8	99.6	100.0	100.5	103.5	104.9	105.6	–
3241	Petroleum and coal products	76.7	75.8	78.9	84.5	85.6	90.1	94.8	100.0	102.1	107.8	113.2	112.2	–
3251	Basic chemicals	91.4	90.1	89.4	89.9	95.1	92.3	90.0	100.0	102.5	114.7	118.4	111.0	–
3252	Resin, rubber, and artificial fibers	75.8	74.7	80.6	83.8	93.5	95.9	93.3	100.0	105.5	108.8	108.1	103.8	–
3253	Agricultural chemicals	84.6	81.0	81.3	85.6	87.4	90.7	92.1	100.0	98.8	87.6	91.4	91.1	–
3254	Pharmaceuticals and medicines	91.4	92.6	88.2	88.1	92.4	96.3	99.9	100.0	92.9	94.6	93.4	97.4	–
3255	Paints, coatings, and adhesives	85.1	85.9	87.6	90.9	94.1	92.7	98.3	100.0	99.1	98.8	98.5	102.1	–
3256	Soap, cleaning compounds, and toiletries	83.2	84.2	83.4	86.9	88.6	93.9	95.6	100.0	96.6	91.1	99.2	102.7	–
3259	Other chemical products and preparations	76.6	78.0	84.7	90.6	92.6	94.4	94.2	100.0	99.4	109.2	120.0	111.3	–
3261	Plastics products	84.7	86.3	90.3	91.9	94.4	94.5	97.0	100.0	103.5	109.3	111.2	113.3	–
3262	Rubber products	83.0	83.8	84.9	90.4	90.3	92.8	94.4	100.0	100.5	101.4	103.9	104.2	–
3271	Clay products and refractories	89.2	87.5	91.5	91.9	96.6	97.4	102.6	100.0	101.3	103.5	103.6	97.6	–
3272	Glass and glass products	80.0	79.1	84.3	86.1	87.5	88.8	96.5	100.0	102.7	108.6	109.7	105.2	–
3273	Cement and concrete products	94.8	93.7	94.8	96.5	95.0	98.2	100.6	100.0	103.5	104.1	100.4	97.1	–
3274	Lime and gypsum products	84.1	82.7	88.5	90.1	87.8	88.8	92.4	100.0	113.1	102.7	97.0	100.1	–
3279	Other nonmetallic mineral products	79.8	81.4	90.2	89.3	90.5	91.7	96.5	100.0	98.8	95.5	95.6	96.8	–
3311	Iron and steel mills and ferroalloy production	69.6	67.2	74.1	81.7	87.2	89.7	94.1	100.0	101.7	106.5	108.5	106.7	–
3312	Steel products from purchased steel	83.8	86.4	89.9	95.9	100.0	100.5	100.5	100.0	100.3	94.2	96.4	97.1	–
3313	Alumina and aluminum production	91.9	93.3	96.8	96.0	100.3	96.8	95.9	100.0	101.1	104.3	97.8	96.9	–
3314	Other nonferrous metal production	95.6	95.8	98.8	101.8	105.1	102.9	105.7	100.0	111.2	108.9	103.1	100.5	–
3315	Foundries	85.3	84.5	85.8	89.8	91.4	93.1	96.2	100.0	101.6	104.9	104.0	109.3	–
3321	Forging and stamping	88.6	86.5	91.7	94.6	93.7	94.2	97.6	100.0	103.7	110.9	121.3	121.8	–
3322	Cutlery and hand tools	85.1	85.4	87.2	91.7	94.4	97.8	104.4	100.0	100.0	107.8	105.8	110.2	–
3323	Architectural and structural metals	87.8	89.1	92.5	93.4	95.1	93.9	94.2	100.0	101.1	101.8	101.0	100.7	–
3324	Boilers, tanks, and shipping containers	90.4	92.6	95.3	94.8	100.5	97.8	100.7	100.0	101.3	98.9	97.7	98.2	–
3325	Hardware	84.4	83.8	86.9	89.6	95.7	97.3	102.6	100.0	101.0	106.5	115.8	114.6	–
3326	Spring and wire products	85.2	88.4	90.9	95.3	91.5	99.5	102.8	100.0	111.6	112.9	114.6	110.6	–
3327	Machine shops and threaded products	78.8	79.8	87.2	86.9	91.6	98.7	100.0	100.0	99.3	103.9	107.2	107.2	–

51. Continued—Annual indexes of output per hour for selected NAICS industries, 1990-2002

[1997=100]

NAICS	Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
3328	Coating, engraving, and heat treating metals	81.6	78.1	86.9	91.9	96.5	102.8	102.9	100.0	101.7	101.5	105.9	105.1	-
3329	Other fabricated metal products	86.7	85.9	90.6	92.1	95.0	97.1	98.9	100.0	102.3	100.2	100.8	98.2	-
3331	Agriculture, construction, and mining machinery	82.8	77.2	79.6	84.1	91.0	95.6	95.9	100.0	104.2	95.0	101.0	99.5	-
3332	Industrial machinery	80.6	81.1	79.5	84.9	90.0	97.9	98.8	100.0	94.4	105.2	129.7	104.6	-
3333	Commercial and service industry machinery	91.4	89.6	96.5	101.7	101.2	103.0	106.3	100.0	107.5	111.2	101.4	94.4	-
3334	HVAC and commercial refrigeration equipment	88.8	88.2	90.8	93.8	97.3	96.6	97.8	100.0	106.6	110.4	108.3	110.8	-
3335	Metalworking machinery	85.3	82.3	89.3	89.3	94.0	99.1	98.1	100.0	99.1	100.5	106.4	102.0	-
3336	Turbine and power transmission equipment	85.1	84.6	81.2	84.8	93.3	92.1	97.9	100.0	106.4	113.3	117.1	130.2	-
3339	Other general purpose machinery	85.9	85.2	85.1	89.8	91.5	94.6	95.1	100.0	103.2	105.6	113.0	109.4	-
3341	Computer and peripheral equipment	14.3	15.8	20.6	27.9	35.9	51.3	72.6	100.0	138.6	190.3	225.4	237.0	-
3342	Communications equipment	47.3	49.3	59.3	62.1	70.1	74.6	84.3	100.0	102.7	134.0	165.5	155.2	-
3343	Audio and video equipment	75.5	82.8	92.1	98.8	108.5	140.0	104.7	100.0	103.1	116.2	123.3	126.3	-
3344	Semiconductors and electronic components	21.4	24.5	29.6	34.1	43.1	63.4	81.8	100.0	125.2	174.5	233.3	231.6	-
3345	Electronic instruments	76.0	80.5	83.1	85.8	88.8	96.8	97.7	100.0	101.3	105.1	114.3	116.1	-
3346	Magnetic media manufacturing and reproduction	86.6	91.2	93.0	96.8	106.1	106.7	103.8	100.0	105.4	106.8	104.0	98.6	-
3351	Electric lighting equipment	87.3	88.5	93.6	90.8	94.5	92.2	95.6	100.0	103.8	102.5	101.9	105.4	-
3352	Household appliances	76.4	76.4	82.4	88.9	95.0	92.7	93.1	100.0	105.1	104.3	117.5	122.6	-
3353	Electrical equipment	73.6	72.7	78.9	85.8	89.0	98.1	100.2	100.0	99.8	98.9	100.6	101.0	-
3359	Other electrical equipment and components	75.3	74.2	81.6	86.8	89.4	92.0	96.0	100.0	105.5	114.8	120.5	113.5	-
3361	Motor vehicles	86.0	82.4	91.2	89.8	90.3	88.6	91.0	100.0	113.3	123.3	110.4	108.7	-
3362	Motor vehicle bodies and trailers	75.8	71.8	88.3	96.3	97.7	97.3	98.4	100.0	102.7	103.1	98.4	99.4	-
3363	Motor vehicle parts	75.7	74.5	82.4	88.5	91.8	92.3	93.1	100.0	104.8	110.4	112.7	114.8	-
3364	Aerospace products and parts	87.7	92.1	94.1	98.2	93.8	93.7	98.1	100.0	118.5	118.0	101.0	114.7	-
3365	Railroad rolling stock	77.2	80.0	81.1	82.3	83.1	82.0	80.9	100.0	102.9	116.0	117.7	124.7	-
3366	Ship and boat building	99.6	92.6	98.5	101.3	99.0	93.1	94.1	100.0	100.3	112.2	120.1	119.8	-
3369	Other transportation equipment	62.6	62.0	88.4	99.8	93.4	93.1	99.8	100.0	110.8	113.3	130.9	146.9	-
3371	Household and institutional furniture	87.6	88.2	92.9	93.8	94.1	97.1	99.5	100.0	102.7	103.7	102.5	106.1	-
3372	Office furniture and fixtures	80.8	78.8	86.2	87.9	83.4	84.3	85.6	100.0	100.1	98.5	100.2	97.1	-
3379	Other furniture-related products	88.1	88.6	88.4	90.5	93.6	94.5	96.7	100.0	107.2	102.5	100.1	105.3	-
3391	Medical equipment and supplies	81.2	83.1	88.1	91.1	90.8	95.0	100.0	100.0	108.9	109.6	114.2	119.0	-
3399	Other miscellaneous manufacturing	90.1	90.6	90.0	92.3	93.0	96.0	99.6	100.0	101.9	105.2	112.9	110.9	-
	Wholesale trade													
42	Wholesale trade	77.8	79.1	86.2	89.5	91.3	93.3	96.2	100.0	104.4	110.9	114.1	117.1	123.6
423	Durable goods	65.7	66.1	75.0	80.5	84.5	88.9	94.0	100.0	105.6	115.3	119.6	120.3	127.7
4231	Motor vehicles and parts	76.6	73.3	82.2	88.0	94.1	93.6	94.9	100.0	104.7	119.8	114.0	114.1	121.7
4232	Furniture and furnishings	82.4	87.2	92.0	95.8	93.3	96.8	97.0	100.0	97.5	100.8	105.5	105.4	101.8
4233	Lumber and construction supplies	115.0	113.2	119.6	113.9	111.9	103.6	103.0	100.0	102.9	104.8	101.7	108.6	119.2
4234	Commercial equipment	33.8	37.3	48.2	56.2	60.5	74.7	88.4	100.0	118.2	141.1	148.9	164.9	189.4
4235	Metals and minerals	101.6	102.6	109.1	111.7	110.1	101.2	102.7	100.0	102.4	96.0	99.2	102.2	102.2
4236	Electric goods	46.8	47.6	51.4	59.1	68.2	79.3	87.8	100.0	105.9	126.2	151.7	148.1	161.2
4237	Hardware and plumbing	88.8	86.5	95.6	94.3	101.3	98.0	99.1	100.0	103.5	107.8	111.1	102.6	107.9
4238	Machinery and supplies	78.9	74.2	79.7	84.3	85.4	89.7	93.9	100.0	104.2	101.4	104.1	102.7	100.2
4239	Miscellaneous durable goods	89.5	96.6	112.1	113.2	106.1	99.2	101.0	100.0	101.8	112.6	116.7	116.1	125.5
424	Nondurable goods	98.4	99.8	103.2	103.0	101.8	99.7	99.2	100.0	102.8	104.1	103.5	106.9	112.6
4241	Paper and paper products	81.0	85.5	96.5	97.2	101.5	99.0	96.5	100.0	100.4	105.5	105.5	109.0	120.2
4242	Druggists' goods	81.8	86.6	91.8	89.3	92.8	95.4	98.3	100.0	99.6	101.7	96.8	101.2	116.0
4243	Apparel and piece goods	103.9	103.3	100.1	97.7	103.8	92.2	99.0	100.0	104.1	103.5	102.7	102.4	111.5
4244	Grocery and related products	96.4	98.2	103.6	105.1	103.3	103.0	99.8	100.0	101.9	103.6	105.2	109.4	111.8
4245	Farm product raw materials	80.6	85.9	85.9	84.0	80.4	87.7	90.6	100.0	100.4	114.2	119.0	120.0	135.4
4246	Chemicals	107.3	106.6	112.5	110.0	110.5	102.1	100.0	100.0	99.3	98.0	95.8	93.6	96.9
4247	Petroleum	97.3	107.0	118.3	119.1	115.8	108.7	105.9	100.0	115.0	112.0	112.5	116.5	126.0
4248	Alcoholic beverages	109.4	111.2	107.4	105.6	105.9	102.5	104.5	100.0	109.7	110.1	111.0	111.6	117.3
4249	Miscellaneous nondurable goods	107.3	98.2	93.9	97.5	94.8	96.2	98.7	100.0	101.7	99.6	106.2	104.2	97.0
425	Electronic markets and agents and brokers	70.7	73.6	81.5	85.9	88.0	91.1	95.7	100.0	104.6	114.4	124.1	131.3	132.6
42511	Business to business electronic markets	70.4	72.6	80.3	84.8	88.3	90.5	95.3	100.0	103.5	121.7	141.3	169.4	205.0
42512	Wholesale trade agents and brokers	70.8	74.0	82.3	86.8	88.4	91.8	96.1	100.0	104.8	110.5	115.7	114.2	109.3
	Retail trade													
44-45	Retail trade	83.2	83.3	86.8	89.4	92.8	94.7	97.7	100.0	104.3	110.3	114.2	117.4	122.7
441	Motor vehicle and parts dealers	89.7	88.3	92.6	94.0	96.9	97.0	98.8	100.0	102.7	106.4	107.2	110.0	109.7
4411	Automobile dealers	92.1	90.8	94.8	96.0	98.0	97.2	98.9	100.0	102.7	106.4	106.6	109.1	106.0
4412	Other motor vehicle dealers	69.0	71.7	78.3	84.1	90.2	91.0	97.7	100.0	105.9	113.0	108.6	112.6	116.4
4413	Auto parts, accessories, and tire stores	85.0	84.0	89.1	90.6	95.4	97.9	98.3	100.0	105.7	110.0	112.0	109.3	115.8
442	Furniture and home furnishings stores	80.7	81.1	88.1	88.3	90.4	94.1	99.4	100.0	101.7	109.6	115.7	118.5	125.1
4421	Furniture stores	82.1	83.5	89.0	89.0	88.9	92.5	97.8	100.0	102.1	108.2	114.8	121.1	128.6
4422	Home furnishings stores	78.5	77.6	86.8	87.2	92.1	95.9	101.3	100.0	101.3	111.4	116.8	115.6	121.4
443	Electronics and appliance stores	46.0	49.2	56.9	65.5	77.6	89.2	95.0	100.0	122.9	152.2	177.7	199.1	240.0
444	Building material and garden supply stores	81.8	80.2	84.0	88.0	93.7	93.7	97.5	100.0	106.7	112.3	113.1	115.8	119.9

51. Continued - Annual indexes of output per hour for selected NAICS industries, 1990-2002

[1997=100]

NAICS	Industry	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
4441	Building material and supplies dealers	83.2	80.7	84.7	89.1	94.8	94.8	97.6	100.0	107.6	113.7	113.8	115.3	119.8
4442	Lawn and garden equipment and supplies stores	74.5	77.5	80.2	81.5	86.9	87.0	97.1	100.0	101.2	103.5	108.2	119.4	121.2
445	Food and beverage stores	107.1	106.6	106.9	105.4	104.3	102.5	100.3	100.0	99.9	103.7	105.1	107.6	110.3
4451	Grocery stores	106.5	106.6	106.7	105.9	104.9	103.0	100.8	100.0	100.3	104.3	104.9	107.5	110.3
4452	Specialty food stores	122.9	115.0	111.4	107.6	104.5	101.1	95.5	100.0	95.0	99.6	105.6	110.8	114.2
4453	Beer, wine and liquor stores	100.1	100.2	101.0	94.4	92.9	96.2	103.1	100.0	105.8	99.8	111.1	110.4	111.8
446	Health and personal care stores	92.0	91.6	90.7	91.9	91.8	93.0	95.7	100.0	104.1	106.9	111.4	112.7	118.8
447	Gasoline stations	84.8	85.7	88.5	92.8	96.8	99.7	99.4	100.0	105.6	110.6	106.5	109.8	117.5
448	Clothing and clothing accessories stores	69.5	70.5	75.3	78.9	83.3	91.2	97.9	100.0	105.4	112.8	120.3	123.5	129.0
4481	Clothing stores	68.9	71.4	77.1	79.2	81.9	90.1	97.1	100.0	106.7	113.3	120.9	125.2	132.7
4482	Shoe stores	73.7	73.1	78.2	79.2	88.3	93.7	102.4	100.0	97.8	104.9	109.6	115.8	120.0
4483	Jewelry, luggage, and leather goods stores	68.6	64.5	65.0	77.1	85.0	94.1	97.3	100.0	107.0	118.3	128.0	122.5	121.5
451	Sporting goods, hobby, book, and music stores	80.8	85.6	83.8	84.0	87.2	93.0	94.7	100.0	108.7	114.9	121.1	125.4	132.9
4511	Sporting goods and musical instrument stores	77.1	82.8	79.8	80.6	83.9	92.3	92.5	100.0	112.9	120.4	128.3	130.4	137.9
4512	Book, periodical, and music stores	89.0	91.8	92.5	91.6	94.5	94.5	99.3	100.0	101.0	104.7	108.0	116.0	123.8
452	General merchandise stores	75.3	79.0	83.0	88.5	90.6	92.2	96.9	100.0	105.0	113.1	119.9	124.2	130.5
4521	Department stores	84.0	88.3	91.6	95.0	95.1	94.7	98.4	100.0	100.6	104.5	106.3	104.0	104.7
4529	Other general merchandise stores	61.4	64.8	69.7	77.8	82.6	87.6	94.3	100.0	113.4	129.8	145.9	162.1	177.5
453	Miscellaneous store retailers	70.6	68.0	74.2	79.1	87.0	89.5	95.0	100.0	108.3	109.8	111.3	108.4	115.6
4531	Florists	75.1	75.9	85.1	91.4	85.4	83.5	96.1	100.0	101.2	117.3	116.0	108.6	120.7
4532	Office supplies, stationery and gift stores	64.6	66.3	71.5	75.8	87.5	90.9	91.8	100.0	113.0	118.0	124.1	125.1	140.3
4533	Used merchandise stores	84.9	83.1	89.7	88.9	87.3	90.2	97.4	100.0	113.5	109.8	115.7	115.0	121.4
4539	Other miscellaneous store retailers	79.6	69.2	74.7	80.5	89.7	90.5	98.0	100.0	105.0	101.6	99.6	93.2	92.8
454	Nonstore retailers	54.4	55.0	63.4	66.7	73.8	80.9	91.6	100.0	111.3	125.4	142.8	146.9	169.6
4541	Electronic shopping and mail-order houses	43.5	46.7	50.6	58.3	62.9	71.9	84.4	100.0	118.2	141.5	159.8	177.5	209.8
4542	Vending machine operators	97.1	95.4	95.1	92.8	94.1	89.3	96.9	100.0	114.1	118.1	127.1	110.4	113.3
4543	Direct selling establishments	70.0	67.6	82.1	79.7	89.2	94.7	102.2	100.0	96.2	96.3	104.3	98.7	110.2
	Transportation and warehousing													
481	Air transportation	77.5	78.2	81.4	84.7	90.8	95.3	98.8	100.0	97.6	98.2	98.2	91.9	103.2
482111	Line-haul railroads	69.8	75.3	82.3	85.7	88.6	92.0	98.4	100.0	102.1	105.5	114.3	121.9	131.9
48412	General freight trucking, long-distance	88.5	92.4	97.5	95.6	98.1	95.4	95.7	100.0	99.1	102.0	105.5	104.2	109.4
491	U.S. Postal service	96.1	95.8	96.5	99.0	98.5	98.3	96.7	100.0	101.4	102.4	104.9	106.1	107.0
	Information													
5111	Newspaper, book, and directory publishers	97.4	96.1	95.8	95.3	93.0	93.5	92.7	100.0	104.5	108.5	110.1	106.4	108.1
5112	Software publishers	28.6	30.6	42.7	51.7	64.6	73.0	88.0	100.0	115.9	113.0	103.9	101.9	106.7
51213	Motion picture and video exhibition	109.4	108.9	104.1	104.6	103.4	99.9	100.0	100.0	99.9	102.0	106.5	104.7	104.4
5151	Radio and television broadcasting	96.1	97.8	102.8	101.4	106.0	106.1	104.1	100.0	99.1	99.4	98.4	94.3	100.4
5152	Cable and other subscription programming	98.8	94.3	96.0	93.6	92.0	94.4	93.7	100.0	129.3	133.2	135.7	125.3	131.4
5171	Wired telecommunications carriers	64.8	68.4	74.5	79.7	85.1	90.6	97.5	100.0	105.5	112.7	119.9	121.0	130.6
5172	Wireless telecommunications carriers	76.3	73.8	85.6	94.8	97.1	98.3	103.0	100.0	114.2	134.3	139.0	172.7	192.0
5175	Cable and other program distribution	99.1	94.3	95.9	93.5	91.9	94.2	93.5	100.0	95.7	94.5	90.4	87.6	93.5
	Finance and insurance													
52211	Commercial banking	80.5	83.2	83.3	90.3	92.9	96.0	99.3	100.0	98.0	101.5	104.2	101.6	103.8
	Real estate and rental and leasing													
532111	Passenger car rental	89.8	97.8	104.4	106.1	107.9	101.1	108.9	100.0	101.2	113.1	112.0	112.1	113.3
53212	Truck, trailer and RV rental and leasing	70.7	71.7	69.5	75.8	82.0	90.3	96.7	100.0	93.7	97.8	95.9	93.6	91.4
	Professional, scientific, and technical services													
541213	Tax preparation services	92.4	84.7	99.5	119.1	119.9	96.2	92.1	100.0	105.1	99.2	91.8	78.2	92.1
54181	Advertising agencies	105.0	99.7	111.9	111.3	106.8	101.4	102.1	100.0	95.8	110.1	116.6	116.7	123.9
	Accomodation and food services													
7211	Traveler accommodations	82.9	85.4	92.9	93.0	97.0	99.2	100.1	100.0	100.0	103.6	107.7	102.0	104.1
722	Food services and drinking places	102.9	102.3	101.7	102.3	100.8	100.6	99.2	100.0	101.2	101.1	103.5	103.7	104.9
7221	Full-service restaurants	99.1	98.3	97.5	97.7	97.8	96.6	96.3	100.0	100.0	99.2	100.8	100.8	102.0
7222	Limited-service eating places	103.3	103.3	102.7	105.6	103.6	104.7	102.2	100.0	102.4	102.5	105.1	106.6	107.1
7223	Special food services	107.2	106.9	106.4	103.8	101.1	99.3	97.6	100.0	102.1	106.0	111.7	108.4	108.1
7224	Drinking places, alcoholic beverages	125.7	121.2	121.5	112.7	102.6	104.4	102.4	100.0	100.0	99.4	100.4	98.2	107.2
	Other services (except public administration)													
8111	Automotive repair and maintenance	92.8	86.5	90.0	91.2	96.7	102.9	98.9	100.0	105.0	106.9	108.6	109.3	103.7
81211	Hair, nail and skin care services	81.6	79.8	85.6	84.3	88.7	92.4	97.1	100.0	102.7	103.6	103.0	109.5	104.2
81221	Funeral homes and funeral services	96.1	94.3	104.7	100.4	103.6	100.4	97.9	100.0	103.8	100.4	94.5	93.9	90.9
8123	Drycleaning and laundry services	95.6	93.2	94.9	93.8	95.9	98.8	101.6	100.0	105.0	109.5	113.7	121.1	120.2
81292	Photofinishing	117.3	115.6	116.2	123.6	124.9	114.7	103.2	100.0	99.4	106.9	107.6	115.0	133.6

NOTE: Dash indicates data are not available.

52. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		2002				2003				2004
	2002	2003	I	II	III	IV	I	II	III	IV	I
United States	5.8	6.0	5.7	5.8	5.7	5.9	5.8	6.1	6.1	5.9	5.6
Canada	7.0	6.9	7.1	6.9	7.0	6.9	6.7	6.9	7.2	6.8	6.7
Australia	6.4	6.1	6.7	6.4	6.3	6.2	6.2	6.2	6.1	5.8	5.7
Japan	5.4	5.3	5.4	5.4	5.5	5.4	5.4	5.4	5.2	5.1	5.0
France	8.7	9.3	8.5	8.6	8.7	8.9	9.0	9.2	9.4	9.4	9.4
Germany	8.6	9.3	8.3	8.5	8.7	8.9	9.2	9.4	9.4	9.3	9.2
Italy[1]	9.1	8.8	9.2	9.2	9.1	9.0	9.0	8.8	8.7	8.6	8.6
Sweden[2]	5.1	5.8	5.2	5.0	5.1	5.2	5.2	5.6	5.8	6.2	6.6
United Kingdom	5.2	5.0	5.1	5.2	5.2	5.1	5.1	5.0	5.0	4.9	4.8

[1] Quarterly rates are for the first month of the quarter.

[2] Preliminary data for 2003.

NOTE: Quarterly figures for France and Germany are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. See "Notes on the data" for information on breaks in series. For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries, 1959-2003* (Bureau of Labor Statistics, June 23, 2004), on the Internet at **http://www.bls.gov/fls/home.htm**.

Monthly and quarterly unemployment rates, updated monthly, are also on this site.

53. Annual data: employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Civilian labor force											
United States	129,200	131,056	132,304	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510
Canada	14,308	14,400	14,517	14,669	14,958	15,237	15,536	15,789	16,027	16,475	16,819
Australia	8,613	8,770	8,995	9,115	9,204	9,339	9,414	9,590	9,752	9,907	10,092
Japan	65,470	65,780	65,990	66,450	67,200	67,240	67,090	66,990	66,870	66,240	66,010
France	24,480	24,670	24,760	25,010	25,130	25,460	25,790	26,070	26,350	26,590	26,730
Germany	39,102	39,074	38,980	39,142	39,415	39,754	39,375	39,302	39,459	39,413	39,276
Italy	22,570	22,450	22,460	22,570	22,680	22,960	23,130	23,340	23,540	23,750	23,880
Netherlands	7,010	7,150	7,210	7,300	7,540	7,620	7,850	8,150	8,340	8,300	8,330
Sweden	4,444	4,418	4,460	4,459	4,418	4,402	4,430	4,489	4,530	4,544	4,567
United Kingdom	28,165	28,149	28,157	28,260	28,417	28,479	28,769	28,930	29,053	29,288	29,490
Participation rate[1]											
United States	66.3	66.6	66.6	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2
Canada	65.5	65.2	64.9	64.7	65.0	65.4	65.8	65.9	66.0	66.8	67.3
Australia	63.5	63.9	64.5	64.6	64.3	64.3	64.0	64.4	64.4	64.4	64.6
Japan	63.3	63.1	62.9	63.0	63.2	62.8	62.4	62.0	61.6	60.8	60.3
France	55.4	55.5	55.4	55.6	55.5	55.9	56.3	56.6	56.8	57.0	57.0
Germany	57.8	57.4	57.1	57.1	57.3	57.7	56.8	56.6	56.6	56.3	56.1
Italy	47.9	47.3	47.1	47.1	47.2	47.6	47.8	48.1	48.3	48.6	48.8
Netherlands	57.9	58.6	58.8	59.2	60.8	61.1	62.6	64.5	65.8	65.0	64.6
Sweden	64.5	63.7	64.1	64.0	63.3	62.8	62.8	63.8	63.7	64.0	64.0
United Kingdom	62.7	62.6	62.4	62.4	62.6	62.5	62.9	62.9	62.7	62.9	62.9
Employed											
United States	120,259	123,060	124,900	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736
Canada	12,770	13,027	13,271	13,380	13,705	14,068	14,456	14,827	14,997	15,325	15,660
Australia	7,699	7,942	8,256	8,364	8,444	8,618	8,762	8,989	9,091	9,271	9,481
Japan	63,810	63,860	63,890	64,200	64,900	64,450	63,920	63,790	63,470	62,650	62,510
France	21,710	21,750	21,960	22,040	22,170	22,600	23,050	23,690	24,140	24,280	24,250
Germany	35,989	35,756	35,780	35,637	35,508	36,061	36,042	36,236	36,350	36,018	35,615
Italy	20,270	19,940	19,820	19,920	19,990	20,210	20,460	20,840	21,270	21,580	21,790
Netherlands	6,570	6,660	6,730	6,860	7,160	7,320	7,600	7,910	8,130	8,070	8,010
Sweden	4,028	3,992	4,056	4,019	3,973	4,034	4,117	4,229	4,303	4,310	4,303
United Kingdom	25,242	25,429	25,718	25,964	26,433	26,696	27,048	27,350	27,570	27,768	28,011
Employment-population ratio[2]											
United States	61.7	62.5	62.9	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3
Canada	58.5	59.0	59.4	59.1	59.7	60.4	61.3	62.1	61.9	62.4	63.0
Australia	56.8	57.8	59.2	59.3	59.0	59.3	59.6	60.3	60.1	60.3	60.7
Japan	61.7	61.3	60.9	60.9	61.0	60.2	59.4	59.0	58.4	57.5	57.1
France	49.1	49.0	49.1	49.0	49.0	49.7	50.3	51.4	52.0	52.0	51.7
Germany	53.2	52.6	52.4	52.0	51.6	52.3	52.0	52.2	52.2	51.5	50.9
Italy	43.0	42.0	41.5	41.6	41.6	41.9	42.3	42.9	43.6	44.1	44.6
Netherlands	54.2	54.6	54.9	55.7	57.8	58.7	60.6	62.6	64.2	63.2	62.1
Sweden	58.5	57.6	58.3	57.7	56.9	57.6	58.4	60.1	60.5	60.7	60.3
United Kingdom	56.2	56.5	57.0	57.4	58.2	58.6	59.1	59.4	59.5	59.6	59.8
Unemployed											
United States	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774
Canada	1,539	1,373	1,246	1,289	1,252	1,169	1,080	962	1,031	1,150	1,159
Australia	914	829	739	751	759	721	652	602	661	636	611
Japan	1,660	1,920	2,100	2,250	2,300	2,790	3,170	3,200	3,400	3,590	3,500
France	2,770	2,920	2,800	2,970	2,960	2,870	2,740	2,380	2,210	2,310	2,480
Germany	3,113	3,318	3,200	3,505	3,907	3,693	3,333	3,065	3,110	3,396	3,661
Italy	2,300	2,510	2,640	2,650	2,690	2,750	2,670	2,500	2,270	2,160	2,100
Netherlands	440	490	480	440	370	300	250	240	210	230	320
Sweden	416	426	404	440	445	368	313	260	227	234	264
United Kingdom	2,916	2,716	2,439	2,297	1,985	1,783	1,721	1,580	1,483	1,520	1,479
Unemployment rate											
United States	6.9	6.1	5.6	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0
Canada	10.8	9.5	8.6	8.8	8.4	7.7	7.0	6.1	6.4	7.0	6.9
Australia	10.6	9.4	8.2	8.2	8.3	7.7	6.9	6.3	6.8	6.4	6.1
Japan	2.5	2.9	3.2	3.4	3.4	4.1	4.7	4.8	5.1	5.4	5.3
France	11.3	11.8	11.3	11.9	11.8	11.3	10.6	9.1	8.4	8.7	9.3
Germany	8.0	8.5	8.2	9.0	9.9	9.3	8.5	7.8	7.9	8.6	9.3
Italy	10.2	11.2	11.8	11.7	11.9	12.0	11.5	10.7	9.6	9.1	8.8
Netherlands	6.3	6.9	6.7	6.0	4.9	3.9	3.2	2.9	2.5	2.8	3.8
Sweden	9.4	9.6	9.1	9.9	10.1	8.4	7.1	5.8	5.0	5.1	5.8
United Kingdom	10.4	9.6	8.7	8.1	7.0	6.3	6.0	5.5	5.1	5.2	5.0

[1] Labor force as a percent of the working-age population.

[2] Employment as a percent of the working-age population.

NOTE: See "Notes on the data" for information on breaks in series.

For further qualifications and historical data, see *Comparative Civilian Labor Force Statistics, Ten Countries*, 1959-2003 (Bureau of Labor Statistics, June 23, 2004), on the Internet at: **http://www.bls.gov/fls/home.htm**.

54. Annual indexes of manufacturing productivity and related measures, 12 countries

[1992 = 100]

Item and country	1960	1970	1980	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Output per hour															
United States	–	–	70.5	96.9	97.9	102.1	107.3	113.8	117.0	121.3	126.5	133.7	142.1	142.7	155.9
Canada	37.8	54.9	72.9	93.4	95.3	105.8	110.8	112.4	109.7	113.5	115.5	122.1	129.3	127.0	130.5
Japan	13.8	37.5	63.2	94.4	99.0	101.7	103.3	111.0	116.1	121.0	121.2	126.7	135.9	135.9	139.5
Belgium	18.0	32.9	65.4	96.8	99.1	102.5	108.4	113.2	116.3	125.5	126.9	125.5	130.8	132.6	141.7
Denmark	28.1	49.4	86.2	99.1	99.5	99.3	–	–	–	–	–	–	–	–	–
France	19.9	39.0	61.6	93.9	97.0	101.0	108.9	114.4	114.7	121.7	127.9	133.0	143.2	148.0	152.1
Germany	29.2	52.0	77.2	99.0	98.3	101.8	109.6	112.3	114.7	120.4	122.0	121.4	127.0	127.8	131.0
Italy	24.6	46.2	78.6	96.6	96.1	101.2	104.8	107.9	108.3	110.3	110.8	110.6	113.6	115.9	114.3
Netherlands	18.8	38.5	69.1	98.7	99.0	102.0	113.1	117.3	119.3	121.4	124.1	127.0	132.7	132.3	133.1
Norway	37.6	59.1	77.9	98.1	98.2	99.6	99.6	100.7	102.5	102.0	99.9	103.6	106.6	108.9	110.9
Sweden	27.3	52.2	73.1	94.6	95.5	107.3	117.8	124.5	129.5	141.0	149.5	162.7	175.5	170.3	184.3
United Kingdom	30.0	43.2	54.4	89.2	93.8	103.9	108.5	106.5	105.8	107.7	109.2	114.4	121.9	126.4	127.6
Output															
United States	–	–	75.8	101.6	98.3	103.5	111.1	118.4	121.3	127.9	133.1	139.5	146.1	137.3	139.8
Canada	33.4	58.9	83.6	106.0	99.0	105.9	114.1	119.6	119.6	127.7	133.9	144.9	159.2	153.6	158.0
Japan	10.7	39.2	60.4	97.1	102.0	96.3	94.9	98.9	103.0	106.5	100.2	101.9	109.2	105.5	103.4
Belgium	30.7	57.6	78.2	101.0	100.7	97.0	101.4	104.2	105.9	112.7	114.4	114.4	119.9	120.4	121.6
Denmark	44.4	73.9	94.4	102.8	101.5	95.6	105.6	111.6	106.7	115.2	115.7	117.7	122.1	127.5	127.8
France	30.0	57.7	81.6	99.1	99.8	95.7	100.3	104.9	104.6	109.7	115.0	118.7	124.3	128.0	128.1
Germany	41.5	70.9	85.3	99.1	102.3	92.4	95.1	95.2	92.5	95.7	97.7	95.8	100.1	99.9	99.6
Italy	23.0	48.1	84.4	99.4	99.3	96.5	102.4	107.2	105.4	108.8	110.7	110.3	113.7	114.6	113.8
Netherlands	31.9	59.8	76.9	99.0	99.8	97.7	104.5	108.2	108.9	111.6	114.9	117.6	122.8	121.7	119.7
Norway	57.7	91.0	104.9	101.4	99.0	101.7	104.6	107.3	110.3	114.2	113.7	113.6	112.8	113.4	112.6
Sweden	45.9	80.7	90.7	110.1	104.1	101.9	117.0	131.9	136.4	146.5	158.3	172.5	188.3	183.1	189.3
United Kingdom	67.5	90.2	87.2	105.4	100.1	101.5	106.2	107.8	108.7	110.7	111.4	112.2	114.9	1134.0	109.4
Total hours															
United States	92.1	104.4	107.5	104.8	100.4	101.4	103.6	104.0	103.6	105.4	105.2	104.4	102.8	96.3	89.7
Canada	88.3	107.1	114.6	113.5	103.9	100.1	103.0	106.4	109.0	112.4	115.9	118.7	123.1	120.9	121.1
Japan	77.8	104.4	95.6	102.9	103.1	94.7	91.9	89.1	88.7	88.0	82.7	80.4	80.3	77.7	74.2
Belgium	170.7	174.7	119.7	104.3	101.5	94.7	93.6	92.0	91.0	89.8	90.2	91.2	91.7	90.8	85.8
Denmark	157.8	149.5	109.6	103.7	102.1	96.2	–	–	–	–	–	–	–	–	–
France	140.3	147.8	132.5	105.6	102.9	94.7	92.1	91.7	91.2	90.2	89.9	89.2	86.8	86.5	84.2
Germany	142.3	136.3	110.5	100.1	104.1	90.8	86.8	84.8	80.6	79.5	80.1	78.9	78.8	78.2	76.1
Italy	93.5	104.0	107.4	102.9	103.3	95.4	97.7	99.4	97.3	98.6	99.9	99.8	100.1	98.9	99.5
Netherlands	169.8	155.5	111.2	100.3	100.8	95.8	92.4	92.3	91.2	91.9	92.6	92.6	92.5	91.9	89.9
Norway	153.6	153.9	134.7	103.4	100.8	102.1	105.0	106.6	107.6	112.0	113.7	109.6	105.9	104.1	101.6
Sweden	168.3	154.7	124.0	116.4	109.0	94.9	99.4	105.9	105.3	103.9	105.9	106.0	107.3	107.5	102.7
United Kingdom	224.6	208.8	160.5	118.1	106.6	92.7	97.9	101.2	102.8	102.8	101.9	98.1	94.3	89.8	85.7
Compensation per hour															
United States	14.9	23.7	55.6	90.8	95.6	102.7	105.6	107.9	109.4	111.5	117.4	122.1	131.1	134.3	140.6
Canada	10.0	17.1	47.5	88.3	95.0	102.0	103.7	106.0	107.0	109.3	111.7	115.8	119.6	123.8	126.8
Japan	4.3	16.4	58.5	90.6	96.5	102.7	104.7	108.3	109.1	112.6	115.4	114.8	113.7	114.5	122.8
Belgium	5.4	13.7	52.5	90.1	97.3	104.8	106.1	109.2	111.1	115.2	117.0	118.5	120.6	127.2	136.5
Denmark	3.8	11.1	45.0	92.7	96.0	103.0	–	–	–	–	–	–	–	–	–
France	4.3	10.5	41.2	90.9	96.4	103.1	106.5	110.4	112.2	111.8	112.7	116.6	123.4	128.2	132.4
Germany	8.1	20.7	53.6	89.4	91.5	106.4	111.8	117.6	123.3	125.7	127.6	130.6	137.4	142.0	145.5
Italy	1.8	5.3	30.4	87.6	94.2	105.7	106.8	111.3	119.0	123.0	122.2	124.2	127.8	132.4	135.6
Netherlands	6.2	19.4	60.5	89.8	94.8	104.5	109.0	112.1	114.4	117.2	122.0	126.0	132.0	138.9	146.0
Norway	4.7	11.8	39.0	92.3	97.5	101.5	104.4	109.2	113.6	118.7	125.7	133.0	140.5	148.2	157.2
Sweden	4.1	10.7	37.3	87.8	95.5	97.4	99.8	106.8	115.2	121.0	125.6	130.3	136.8	143.8	149.2
United Kingdom	2.9	6.1	32.1	82.9	93.8	105.1	108.0	109.5	111.3	116.1	123.1	130.4	137.7	144.2	149.2
Unit labor costs: National currency basis															
United States	–	–	78.8	93.7	97.6	100.6	98.5	94.8	93.5	91.9	92.8	91.3	92.3	94.1	90.2
Canada	26.4	31.1	65.2	94.6	99.6	96.4	93.6	94.3	97.5	96.2	96.7	94.9	92.5	97.4	97.1
Japan	31.3	43.8	92.6	95.9	97.5	101.0	101.4	97.5	94.0	93.0	95.2	90.6	83.6	84.4	88.0
Belgium	30.1	41.7	80.3	93.0	98.1	102.3	97.9	96.4	95.5	91.8	92.2	94.4	92.2	95.9	96.4
Denmark	13.6	22.4	52.2	93.5	96.5	103.7	96.2	96.4	103.2	99.4	102.8	103.7	101.8	101.3	102.1
France	21.7	26.8	67.0	96.8	99.3	102.0	97.8	96.5	97.8	91.9	88.1	87.6	86.2	86.6	87.1
Germany	27.8	39.8	69.4	90.3	93.1	104.5	102.0	104.7	107.5	104.5	104.6	107.6	108.1	111.2	111.1
Italy	7.5	11.9	38.7	90.7	98.0	104.5	101.9	103.2	109.8	111.4	110.3	112.3	112.5	114.2	118.7
Netherlands	32.9	50.4	87.6	91.1	95.7	102.4	96.4	95.6	95.9	96.5	98.3	99.1	99.5	105.0	109.7
Norway	12.6	20.0	50.0	94.2	99.2	101.9	104.8	108.4	110.8	116.4	125.7	128.4	131.9	136.1	141.8
Sweden	15.0	20.6	51.0	92.9	100.0	90.8	84.7	85.8	89.0	85.8	84.0	80.1	77.9	84.4	80.9
United Kingdom	9.8	14.1	59.0	92.9	99.9	100.6	99.6	102.8	105.2	107.8	112.7	114.0	113.0	114.2	116.9
Unit labor costs: U.S. dollar basis															
United States	–	–	78.8	93.7	97.6	100.6	98.5	94.8	93.5	91.9	92.8	91.3	92.3	94.1	90.2
Canada	32.9	36.0	67.4	98.0	105.1	90.3	82.8	83.0	86.4	84.0	78.8	77.2	75.3	76.0	74.8
Japan	11.0	15.5	51.8	83.9	91.8	115.3	125.8	131.6	109.5	97.4	92.2	101.0	98.4	88.0	89.1
Belgium	19.4	27.0	88.3	89.5	92.3	95.1	94.2	105.2	99.1	82.4	81.6	80.2	67.8	68.4	72.6
Denmark	12.0	18.0	55.9	91.2	91.0	96.5	91.4	104.0	107.5	90.8	92.6	89.5	76.0	73.4	78.2
France	23.4	25.7	83.9	94.1	93.1	95.3	93.4	102.5	101.2	83.3	79.1	75.3	64.2	62.6	66.4
Germany	10.4	17.1	59.6	87.3	87.5	98.7	98.2	114.2	111.6	94.0	92.9	91.5	79.7	79.5	83.9
Italy	14.3	22.3	55.7	93.3	97.3	81.8	77.9	78.0	87.7	80.6	78.2	76.2	66.1	65.1	71.4
Netherlands	15.3	24.5	77.5	87.9	90.0	96.9	93.2	104.8	100.0	87.0	87.2	84.3	73.3	75.0	82.8
Norway	11.0	17.4	62.9	93.6	95.0	89.2	92.3	106.4	106.6	102.1	103.5	102.2	93.0	94.0	110.3
Sweden	16.9	23.1	70.2	91.3	96.3	67.8	64.0	70.0	77.3	65.4	61.5	56.4	49.5	47.6	48.5
United Kingdom	15.6	19.1	77.7	93.8	100.0	85.6	86.3	91.8	93.0	99.9	105.7	104.4	96.9	93.0	99.4

NOTE: Data for Germany for years before 1991 are for the former West Germany. Data for 1991 onward are for unified Germany. Dash indicates data not available.

55. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]												
	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]	2001[4]
PRIVATE SECTOR[5]													
Total cases	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7	6.3	6.1	5.7
Lost workday cases	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1	3.0	3.0	2.8
Lost workdays	78.7	84.0	86.5	93.8	–	–	–	–	–	–	–	–	–
Agriculture, forestry, and fishing[5]													
Total cases	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9	7.3	7.1	7.3
Lost workday cases	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9	3.4	3.6	3.6
Lost workdays	100.9	112.2	108.3	126.9	–	–	–	–	–	–	–	–	–
Mining													
Total cases	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9	4.4	4.7	4.0
Lost workday cases	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9	2.7	3.0	2.4
Lost workdays	137.2	119.5	129.6	204.7	–	–	–	–	–	–	–	–	–
Construction													
Total cases	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8	8.6	8.3	7.9
Lost workday cases	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0	4.2	4.1	4.0
Lost workdays	143.3	147.9	148.1	161.9	–	–	–	–	–	–	–	–	–
General building contractors:													
Total cases	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4	8.0	7.8	6.9
Lost workday cases	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9	3.7	3.9	3.5
Lost workdays	137.3	137.6	132.0	142.7	–	–	–	–	–	–	–	–	–
Heavy construction, except building:													
Total cases	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2	7.8	7.6	7.8
Lost workday cases	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1	3.8	3.7	4.0
Lost workdays	147.1	144.6	160.1	165.8	–	–	–	–	–	–	–	–	–
Special trades contractors:													
Total cases	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1	8.9	8.6	8.2
Lost workday cases	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1	4.4	4.3	4.1
Lost workdays	144.9	153.1	151.3	168.3	–	–	–	–	–	–	–	–	–
Manufacturing													
Total cases	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7	9.2	9.0	8.1
Lost workday cases	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7	4.6	4.5	4.1
Lost workdays	113.0	120.7	121.5	124.6	–	–	–	–	–	–	–	–	–
Durable goods:													
Total cases	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7	10.1	–	8.8
Lost workday cases	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0	4.8	–	4.3
Lost workdays	116.5	123.3	122.9	126.7	–	–	–	–	–	–	–	–	–
Lumber and wood products:													
Total cases	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2	13.0	12.1	10.6
Lost workday cases	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8	6.7	6.1	5.5
Lost workdays	177.5	172.5	172.0	165.8	–	–	–	–	–	–	–	–	–
Furniture and fixtures:													
Total cases	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2	11.0
Lost workday cases	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9	5.7
Lost workdays	–	–	–	128.4	–	–	–	–	–	–	–	–	–
Stone, clay, and glass products:													
Total cases	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8	10.7	10.4	10.1
Lost workday cases	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0	5.4	5.5	5.1
Lost workdays	149.8	160.5	156.0	152.2	–	–	–	–	–	–	–	–	–
Primary metal industries:													
Total cases	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0	12.9	12.6	10.7
Lost workday cases	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0	6.3	6.3	5.3
Lost workdays	168.3	180.2	169.1	175.5	–	–	–	–	–	–	–	–	11.1
Fabricated metal products:													
Total cases	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9	12.6	11.9	11.1
Lost workday cases	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5	6.0	5.5	5.3
Lost workdays	147.6	155.7	146.6	144.0	–	–	–	–	–	–	–	–	–
Industrial machinery and equipment:													
Total cases	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5	8.5	8.2	11.0
Lost workday cases	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0	3.7	3.6	6.0
Lost workdays	86.8	88.9	86.6	87.7	–	–	–	–	–	–	–	–	–
Electronic and other electrical equipment:													
Total cases	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9	5.7	5.7	5.0
Lost workday cases	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8	2.8	2.9	2.5
Lost workdays	77.5	79.4	83.0	81.2	–	–	–	–	–	–	–	–	–
Transportation equipment:													
Total cases	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6	13.7	13.7	12.6
Lost workday cases	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6	6.4	6.3	6.0
Lost workdays	138.6	153.7	166.1	186.6	–	–	–	–	–	–	–	–	–
Instruments and related products:													
Total cases	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5	4.0
Lost workday cases	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2	2.0
Lost workdays	55.4	57.8	64.4	65.3	–	–	–	–	–	–	–	–	–
Miscellaneous manufacturing industries:													
Total cases	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1	8.4	7.2	6.4
Lost workday cases	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9	4.0	3.6	3.2
Lost workdays	97.6	113.1	104.0	108.2	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

55. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 workers[3]												
	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]	2001[4]
Nondurable goods:													
Total cases	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2	7.8	7.8	6.8
Lost workday cases	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3	4.2	4.2	3.8
Lost workdays	107.8	116.9	119.7	121.8	–	–	–	–	–	–	–	–	–
Food and kindred products:													
Total cases	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6	12.7	12.4	10.9
Lost workday cases	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5	7.3	7.3	6.3
Lost workdays	174.7	202.6	207.2	211.9	–	–	–	–	–	–	–	–	–
Tobacco products:													
Total cases	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4	5.5	6.2	6.7
Lost workday cases	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.4	2.2	3.1	4.2
Lost workdays	64.2	62.3	52.0	42.9	–	–	–	–	–	–	–	–	–
Textile mill products:													
Total cases	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	7.4	6.4	6.0	5.2
Lost workday cases	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4	3.2	3.2	2.7
Lost workdays	81.4	85.1	88.3	87.1	–	–	–	–	–	–	–	–	–
Apparel and other textile products:													
Total cases	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2	5.8	6.1	5.0
Lost workday cases	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6	2.8	3.0	2.4
Lost workdays	80.5	92.1	99.9	104.6	–	–	–	–	–	–	–	–	–
Paper and allied products:													
Total cases	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1	7.0	6.5	6.0
Lost workday cases	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7	3.7	3.4	3.2
Lost workdays	132.9	124.8	122.7	125.9	–	–	–	–	–	–	–	–	–
Printing and publishing:													
Total cases	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4	5.0	5.1	4.6
Lost workday cases	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.8	2.6	2.6	2.4
Lost workdays	63.8	69.8	74.5	74.8	–	–	–	–	–	–	–	–	–
Chemicals and allied products:													
Total cases	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2	4.4	4.2	4.0
Lost workday cases	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1	2.3	2.2	2.1
Lost workdays	63.4	61.6	62.4	64.2	–	–	–	–	–	–	–	–	–
Petroleum and coal products:													
Total cases	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9	4.1	3.7	2.9
Lost workday cases	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8	1.8	1.9	1.4
Lost workdays	68.1	77.3	68.2	71.2	–	–	–	–	–	–	–	–	–
Rubber and miscellaneous plastics products:													
Total cases	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2	10.1	10.7	8.7
Lost workday cases	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.8	5.5	5.8	4.8
Lost workdays	147.2	151.3	150.9	153.3	–	–	–	–	–	–	–	–	–
Leather and leather products:													
Total cases	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.8	10.3	9.0	8.7
Lost workday cases	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5	5.0	4.3	4.4
Lost workdays	130.4	152.3	140.8	128.5	–	–	–	–	–	–	–	–	–
Transportation and public utilities													
Total cases	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3	7.3	6.9	6.9
Lost workday cases	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3	4.4	4.3	4.3
Lost workdays	121.5	134.1	140.0	144.0	–	–	–	–	–	–	–	–	–
Wholesale and retail trade													
Total cases	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5	6.1	5.9	6.6
Lost workday cases	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8	2.7	2.7	2.5
Lost workdays	63.5	65.6	72.0	80.1	–	–	–	–	–	–	–	–	–
Wholesale trade:													
Total cases	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5	6.3	5.8	5.3
Lost workday cases	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3	3.3	3.1	2.8
Lost workdays	71.9	71.5	79.2	82.4	–	–	–	–	–	–	–	–	–
Retail trade:													
Total cases	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5	6.1	5.9	5.7
Lost workday cases	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7	2.5	2.5	2.4
Lost workdays	60.0	63.2	69.1	79.2	–	–	–	–	–	–	–	–	–
Finance, insurance, and real estate													
Total cases	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	.7	1.8	1.9	1.8
Lost workday cases	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	.9	.5	.8	.8	.7
Lost workdays	17.6	27.3	24.1	32.9	–	–	–	–	–	–	–	–	–
Services													
Total cases	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2	4.9	4.9	4.6
Lost workday cases	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.2	2.2	2.2
Lost workdays	51.2	56.4	60.0	68.6	–	–	–	–	–	–	–	–	–

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:
N = number of injuries and illnesses or lost workdays;
EH = total hours worked by all employees during the calendar year; and
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

NOTE: Dash indicates data not available.

56. Fatal occupational injuries by event or exposure, 1997-2002

Event or exposure[1]	Fatalities			
	1997-2001 average	2001[2]	2002	
		Number	Number	Percent
Total	6,036	5,915	5,524	100
Transportation incidents	2,593	2,524	2,381	43
Highway incident	1,421	1,409	1,372	25
Collision between vehicles, mobile equipment	697	727	635	11
Moving in same direction	126	142	155	3
Moving in opposite directions, oncoming	254	257	202	4
Moving in intersection	148	138	145	3
Vehicle struck stationary object or equipment	300	297	326	6
Noncollision incident	369	339	373	7
Jackknifed or overturned—no collision	300	273	312	6
Nonhighway (farm, industrial premises) incident	368	326	322	6
Overturned	202	158	164	3
Aircraft	248	247	192	3
Worker struck by a vehicle	382	383	356	6
Water vehicle	99	90	71	1
Rail vehicle	68	62	64	1
Assaults and violent acts	964	908	840	15
Homicides	709	643	609	11
Shooting	567	509	469	8
Stabbing	64	58	58	1
Other, including bombing	78	76	82	1
Self-inflicted injuries	221	230	199	4
Contact with objects and equipment	995	962	873	16
Struck by object	562	553	506	9
Struck by falling object	352	343	303	5
Struck by flying object	58	60	38	1
Caught in or compressed by equipment or objects	290	266	231	4
Caught in running equipment or machinery	156	144	110	2
Caught in or crushed in collapsing materials	126	122	116	2
Falls	737	810	714	13
Fall to lower level	654	700	634	11
Fall from ladder	111	123	126	2
Fall from roof	155	159	143	3
Fall from scaffold, staging	91	91	87	2
Fall on same level	61	84	63	1
Exposure to harmful substances or environments	529	499	538	10
Contact with electric current	291	285	289	5
Contact with overhead power lines	134	124	122	2
Contact with temperature extremes	41	35	60	1
Exposure to caustic, noxious, or allergenic substances	106	96	98	2
Inhalation of substances	52	49	49	1
Oxygen deficiency	89	83	90	2
Drowning, submersion	71	59	60	1
Fires and explosions	197	188	165	3
Other events or exposures[3]	21	24	13	–

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

[2] The BLS news release issued Sept. 25, 2002, reported a total of 5,900 fatal work injuries for calendar year 2001. Since then, an additional 15 job-related fatalities were identified, bringing the total job-related fatality count for 2001 to 5,915.

[3] Totals for 2001 exclude fatalities from the September 11 terrorist attacks.

[3] Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dash indicates less than 0.5 percent.

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J. Percent paid and/or requested circulation	88.1	88.2

I certify that the statements made by me above are correct and complete.

[signed] Richard M. Devens, Executive Editor

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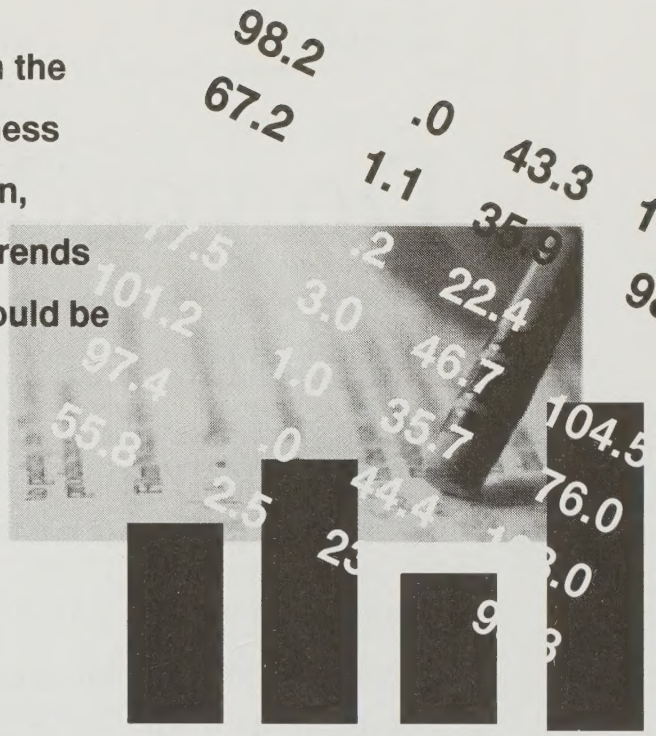

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Producer Price Indexes	October 15	September	November 16	October	December 10	November	2; 40–42
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Real earnings	October 19	September	November 17	October	December 17	November	14–16, 29
Employment Cost Indexes	October 29	3rd quarter					1–3; 30–33
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